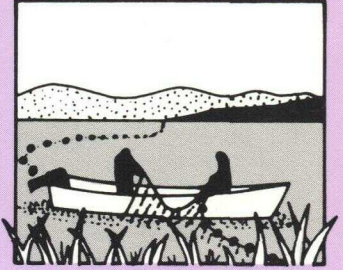
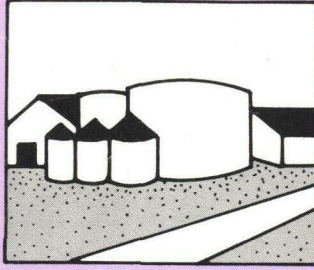
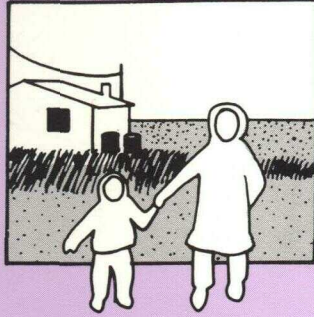
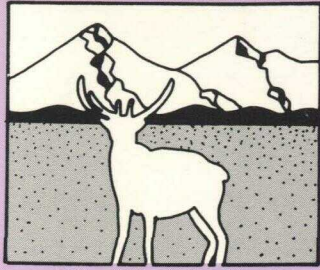


NORTHWEST AREA PLAN



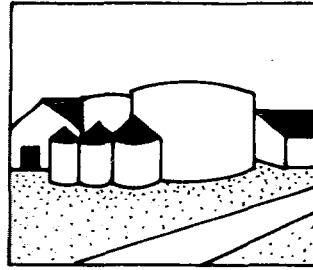
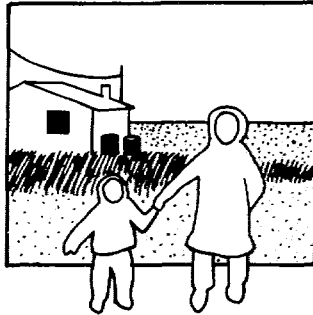
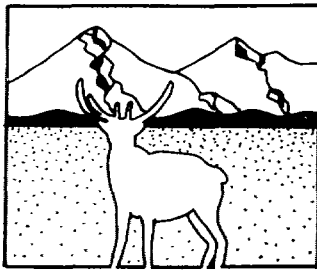
FOR STATE LANDS

FEBRUARY 1989



Alaska Department of
**NATURAL
RESOURCES**

NORTHWEST AREA PLAN



FOR STATE LANDS

FEBRUARY 1989



Alaska Department of
**NATURAL
RESOURCES**

STATE OF ALASKA

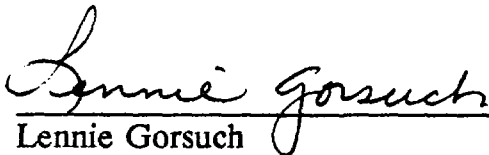
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF LAND AND WATER MANAGEMENT

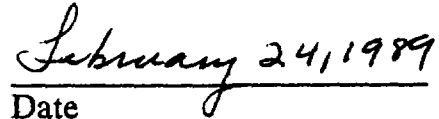
STEVE COWPER, GOVERNOR

NORTHERN REGION
3700 AIRPORT WAY
FAIRBANKS, ALASKA 99709-4613
PHONE: (907) 451-2700

The Commissioner of the Department of Natural Resources finds that the Northwest Area Plan meets the requirements of AS 38.04.065 and 11 AAC 55.010-.030 for Area Land Use Plans and does hereby adopt it as policy of the Department of Natural Resources for state lands within the planning area.

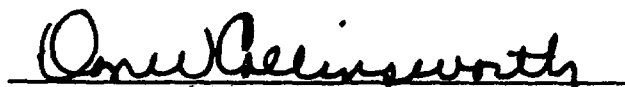


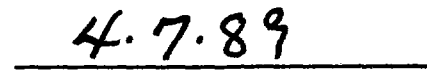
Lennie Gorsuch
DEPARTMENT OF NATURAL RESOURCES



Date

The Alaska Department of Fish and Game endorses the Alaska Department of Natural Resources land planning process as the best method available to make decisions regarding land management practices and allocations. We appreciate the opportunity to represent fish and wildlife values and fish and wildlife uses during the development of the Northwest Area Plan. The department will use the plan policies and guidelines in meeting its constitutional and statutory mandates to protect, preserve, maintain, and enhance fish and wildlife resources in the planning area.


Don W. Collinsworth
DEPARTMENT OF FISH AND GAME


Date

NORTHWEST AREA PLAN

For State Lands

FEBRUARY 1989

PLANNING TEAM, ADVISORY COMMITTEE, AND PLANNING STAFF

The Northwest Area Plan was prepared by an inter-disciplinary planning team representing state agencies, major landowners, and regional governmental organizations within the planning area. The work of the planning team was coor-

dinated by staff from the Resource Allocation Section of the DNR Division of Land and Water Management. DNR Division of Geological and Geophysical Surveys staff served as technical advisors to the planning staff and planning team.

Planning Team and Advisory Committee Members

Agency/Organization	Planning Team	Advisory Committee
Department of Natural Resources	Anna Plager (Chairperson)	Tom Hawkins
Division of:		
Agriculture	Ed Arobio	Frank Mielke Mark Weaver (to 1988) Bill Helm (to 1987)
Forestry	Steve Clautice	Bob Dick John Galea (to 1989) John Sturgeon (to 1987)
Land and Water Management	Bill Copeland	Jerry Brossia Rick Thompson (1985)
Mining	Judd Peterson Jerry Gallagher (to 2/87)	Jerry Gallagher Pedro Denton (to 1987)
Oil and Gas	Kris O'Connor Ted Bond (to 6/86)	Jim Eason Kay Brown (to 1987)
Parks and Outdoor Recreation	Mike Lee Al Meiners (to 6/86)	Neil Johannsen
Dept. of Community and Regional Affairs	Ike Waits, Bert Greist Elizabeth Benson (1986) Susan Cook (1985)	Marty Rutherford Irene Rowan (to 1987)
Dept. of Environmental Conservation	Joyce Beelman	William (Pete) McGee Larry Dietrick (to 1988) Doug Lowry (to 6/87)
Dept. of Fish and Game	Matt Robus	Al Ott Scott Grundy (to 1987)
Dept. of Transportation and Public Facilities	Norm Piispanen	John Martin Mim Dixon (1985)

Planning Team and Advisory Committee Members (Continued)

Agency/Organization	Planning Team	Advisory Committee
Arctic Slope Regional Corporation	William Thomas	William Thomas
Bering Straits Coastal Management Program	Bryan MacLean	Johnson Eningowuk
Bering Straits Native Corporation	Guy Martin	Guy Martin
City of Nome	Tom Abrams Steve Augdahl (to 8/88)	Tom Abrams Steve Augdahl (to 8/88)
NANA Regional Corporation	Walter Sampson Bert Greist (to 1987)	John Rense
North Slope Borough	Karla Kolash Earl Finkler (to 6/86)	Arnold Brower, Jr.
Northwest Arctic Borough	Jason Jessup Willie Goodwin (to 1987) Dave Weingartner (to 6/86)	Charles Greene Fred Wemark (to 6/86)

Planning Staff

Anna Plager, Project Manager
Ed Fogels, Natural Resource Officer (from 5/88)
Diane Stevens, Natural Resource Officer (to 3/88)
David Snarski, Natural Resource Officer (1/88 - 4/88)
Eric Decker, Natural Resource Officer (to 7/87)
Roselynn Smith, Natural Resource Technician (from 10/88)

Department of Natural Resources
Resource Allocation Section
3700 Airport Way
Fairbanks, Alaska 99709-4613
(451-2700)

ACKNOWLEDGEMENTS

The Northwest Area Plan staff thanks the following people, *in addition to the planning team and advisory committee members*, who have helped prepare this plan:

Typists:	Amy Garrett Susan Hollett	Carol Rawlinson Beverly Riddle	Kay Zito
Graphics:	Mario Ayerdis Patty Kerschner	Diane Martin Susan Peck	Valerie Reger Elaine Thomas
Planning:	Veronica Gilbert Yvonne Goldsmith Bob Loeffler	Dick Mylius Frank Rue Marty Welbourn	Alice Iliff Bruce Talbot
Interns:	Winton Weyakpuk	Fred Rohn	Joni Piercy

In addition, we would like to recognize the following staff for their help in data collection and analysis for the resource reports:

Dave Anderson , DF&G - Subsistence	Benjamin Nageak , NSB - Subsistence
Cass Arie y, DNR-DOG - Oil and Gas	Anthony Nakazawa , CES - Subsistence
Ed Arobio , DNR-DOA - Grazing	Kris O'Connor , DNR-DOG - Oil and Gas
Enzo Beccia , DNR-DGGS - Forestry	Diana Rigg , DNR-DPOR - Cultural
Mildred Brown , DNR-DOM - Minerals	Mark Robinson , DNR-DGGS - Minerals
Vernita Cassidy , Rural CAP - Subsistence	Matt Robus , DF&G - Fish and Wildlife
Scott Christy , DNR-DGGS - Minerals	Gary Schultz , DNR-DLWM - Grazing
John Decker , DNR-DGGS - Oil and Gas	Rick Smith , DNR-DLWM - Grazing
Kerwin Krause , DNR-DGGS - Land Conveyance	Fred Sturmann , DNR-DOM - Minerals
Pam Ledgerwood , DNR-DLWM - Grazing and Land Conveyance	Dave Swanson , SCS - Grazing
Bryan MacLean , BSCRSA - Subsistence	Rob Walkinshaw , DNR-DLWM - Minerals
Chris Milles , DNR-DLWM - Grazing	Nancy Welch , DNR-DLWM - Land Conveyance
Craig Mishler , DNR-DGGS - Cultural	Joy Zuke , DNR-DOM - Minerals

HOW TO USE THIS PLAN

Although this plan is lengthy, it is organized for ease of use. The plan has two main sections:

Chapter 2 includes land management policies that apply throughout the planning area. It is organized by types of land uses or resources, such as fish and wildlife, settlement, and trail management.

Chapter 3 describes the management intent for each of seven management units in the planning area. It is organized by geographic area.

In addition, Chapter 1 presents an introduction to the plan and summarizes the plan's overall goals. Chapter 4 describes actions that will implement the plan.

Examples of how to use the plan are shown below. The Table of Contents is on the following page.

Examples:

If you want to know how the plan affects a particular land use or resource -- for example, mining, wildlife habitat, or land sales -- turn to Chapter 2 for general policies that apply to the entire planning area. For example, pages 2-28 through 2-33 present policies on state land sales and describe areas that will be available for sale in the planning area.



If you want to know how the plan affects a particular place -- for example, a parcel on the Kobuk River -- turn to Chapter 3. The planning area is divided into seven management units. Management units are shown on the index map on page 3-1. To find the unit you are interested in, check the index map, then turn to that unit. For example, the Kobuk River is in Management Unit 3, page 3-37.



TABLE OF CONTENTS

page	i	Planning Team, Advisory Committee, and Planning Staff
	iii	Acknowledgements
	iv	How to Use this Plan
	v	Table of Contents
	vii	List of Figures, Tables, and Maps

Chapter 1 Introduction

page	1-1	Summary of Purpose
	1-1	How this Document is Organized
	1-2	Why Plan for State Land
	1-2	Description of Planning Area
	1-6	How Was the Plan Developed?
	1-6	Public Participation
	1-7	Summary of Plan Implementation
	1-7	Summary of How to Change the Plan
	1-7	Statewide Goals
	1-8	Summary of Changes to Major Plan Proposals in the Alternatives and Draft Plan

Chapter 2 Areawide Land Management Policies

page	2-1	Introduction
	2-1	List of Guidelines
	2-5	Coordination and Public Notice
	2-6	Fish and Wildlife Habitat
	2-10	Forestry
	2-12	Grazing
	2-14	Heritage Resources
	2-15	Lakeshore Management
	2-17	Materials
	2-20	Public Access
	2-22	Public & Commercial Recreation
	2-25	Remote Cabins & Trapping Cabins
	2-28	Settlement
	2-37	Shoreline Development
	2-39	Stream Corridors and Instream Flow
	2-43	Subsistence Activities and Traditional Uses
	2-45	Subsurface Resources
	2-53	Trail Management
	2-56	Transportation and Utilities
	2-59	Wetlands Management

Chapter 3 Land Management Policies for Each Management Unit

page	3-3	Introduction
	3-3	Land Use Designations
	3-4	Management Intent
	3-6	Management Guidelines
	3-6	Flexibility of the Plan
	3-9	Management Unit 1: Lisburne
	3-19	Management Unit 2: Kotzebue Sound
	3-37	Management Unit 3: Kobuk
	3-45	Management Unit 4: Northwest Seward Peninsula
	3-57	Management Unit 5: Southwest Seward Peninsula
	3-69	Management Unit 6: Norton Sound
	3-79	Management Unit 7: Remnant Rivers

Chapter 4 Implementation

page	4-1	Introduction
	4-1	Proposed State Land Selections
	4-2	Land Use Classifications
	4-5	Mineral Orders
	4-5	Municipal Entitlement
	4-6	Procedures for Plan Modification and Amendment
	4-7	Recommendations for Further Study
	4-7	Recommendations for Field Staff and Enforcement
	4-8	Recommendations for Cooperative Agreements
	4-8	Recommendations for Additional Access
	4-9	Public Trust Doctrine

Appendices

page	A-1	Appendix A	Glossary
	B-1	Appendix B	Community Notice List By Management Unit
	C-1	Appendix C	Publications Related to the Area Plan (References)
	D-1	Appendix D	Criteria Used for the Chapter 3 Summary Charts
	E-1	Appendix E	Summary of Leases and Permits by Management Unit
	F-1	Appendix F	1985 Population of Communities within the Northwest Planning Area
	G-1	Appendix G	Designations and Approximate Acreage by Subunit
	H-1	Appendix H	Mineral Orders for the Northwest Area Plan
	I-1	Appendix I	Listing of Key Agencies and Phone Numbers
	J-1	Appendix J	Coastal Plan Boundaries
	K-1	Appendix K	U.S.G.S. 1:250,000 Quadrangle Map Index
	L-1	Appendix L	Index

LIST OF FIGURES, TABLES, AND MAPS

FIGURES	Page
Figure 1.1 Tidelands	1-2
Figure 1.2 The Planning Process.....	1-6
 TABLES	 Page
Table 1.1 Land Disposal Areas in the Alternatives, Draft, and Final Plan.....	1-10
Table 1.2 Remote Cabin Areas in the Alternatives, Draft, and Final Plan.....	1-13
Table 4.1 Conversion of Primary Use Designations to Classifications.....	4-2
 MAPS	 Page
Map 1.1 The Northwest Planning Area.....	1-3
Map 2.1 Settlement and Remote Cabin Areas.....	2-35
Map 2.2 Subsurface Designation Summary	2-51
Map 3.1 Management Unit Index	3-1
Map 3.2 Management Unit 1: Lisburne, North.....	3-15
Map 3.3 Management Unit 1: Lisburne, South.....	3-17
Map 3.4 Management Unit 2: Kotzebue Sound, North.....	3-29
Map 3.5 Management Unit 2: Kotzebue Sound, East.....	3-31
Map 3.6 Management Unit 2: Kotzebue Sound, South.....	3-33
Map 3.7 Management Unit 2: Kotzebue Sound, West.....	3-35
Map 3.8 Management Unit 3: Kobuk.....	3-43
Map 3.9 Management Unit 4: Northwest Seward Peninsula, North.....	3-53
Map 3.10 Management Unit 4: Northwest Seward Peninsula, South	3-55
Map 3.11 Management Unit 5: Southwest Seward Peninsula.....	3-67
Map 3.12 Management Unit 6: Norton Sound, North	3-75
Map 3.13 Management Unit 6: Norton Sound, South	3-77
Map 4.1 Summary of New Selections	4-3
Map J.1 Coastal Plan Boundaries, Management Unit 1, North	J-1
Map J.2 Coastal Plan Boundaries, Management Unit 1, South	J-3
Map J.3 Coastal Plan Boundaries, Management Unit 2, North	J-5
Map J.4 Coastal Plan Boundaries, Management Unit 2, East	J-7
Map J.5 Coastal Plan Boundaries, Management Unit 2, South	J-9
Map J.6 Coastal Plan Boundaries, Management Unit 2, West	J-11
Map J.7 Coastal Plan Boundaries, Management Unit 3.....	J-13
Map J.8 Coastal Plan Boundaries, Management Unit 4, North	J-15
Map J.9 Coastal Plan Boundaries, Management Unit 4, South	J-17
Map J.10 Coastal Plan Boundaries, Management Unit 5.....	J-19
Map J.11 Coastal Plan Boundaries, Management Unit 6, North	J-21
Map J.12 Coastal Plan Boundaries, Management Unit 6, South	J-23
Map K U.S.G.S 1:250,000 Quadrangle Map Index.....	K-1

CHAPTER 1

Introduction

	page
Summary of Purpose.....	1-1
How this Document is Organized.....	1-1
Why Plan for State Land.....	1-2
Description of Planning Area.....	1-2
How Was the Plan Developed?.....	1-6
Public Participation.....	1-6
Summary of Plan Implementation	1-7
Summary of How to Change the Plan.....	1-7
Statewide Goals.....	1-7
Summary of Changes to Major Plan Proposals in the Alternatives and Draft Plan.....	1-8



Wetlands near Shaktoolik

Chapter 1

INTRODUCTION

Summary of Purpose

The Northwest Area Plan describes how the Department of Natural Resources (DNR) will manage state land, including uplands, tide, shore, and submerged land (see Map 1-1) in Northwest Alaska. The plan determines land classifications, land disposal locations, remote cabin areas,

land selections, areas open to mineral entry, and guidelines for leases and permits on state lands. The plan does not make decisions for federal, Native corporation, or private lands.

How this Document is Organized

Chapter 1 describes the purpose of the plan, the planning area, and the process used to develop the plan. It includes a summary of how the plan will be implemented and a summary of the process for modifying the plan after it is adopted. It also documents the decisions made for major proposals between the alternatives and the draft plan, and between the draft and final plan.

Chapter 2 presents policies that guide state land management throughout the planning area. These policies are generally consistent for all state lands covered by area plans. Some policies have been modified to reflect conditions unique to the Northwest Area.

Chapter 3 describes the plan's land use designations and management intent. The section on each of the seven management units includes background information, a statement of management intent, the guidelines specific to the

management unit, and tables of major resource values and land use designations.

Chapter 4 discusses specific actions needed to implement the plan. These actions include proposed land selections, classifications, mineral orders, municipal entitlements, and procedures for plan amendment. This chapter also includes recommendations for further study, field staff, cooperative agreements, and additional access. It also describes the public trust doctrine.

Appendices offer a variety of support materials for information presented in the plan: glossary, organization names and addresses, references, criteria used for plan designations, existing permits and leases, community population, acreages for designations, mineral closure orders, list of agencies, coastal plan maps, and an index.

Why Plan for State Land?

State land in the Northwest planning area provides fish, wildlife, water, firewood, minerals, materials, transportation routes, and places to live and recreate. There are many different ideas about how this land should be used, and some of the uses may conflict. However, if the land is managed carefully, many different uses can occur throughout the planning area.

The planning process is a way to openly review resource information and public concerns before making long-range decisions about land management. It addresses and minimizes potential use conflicts. Through planning, the people who use this land can help choose the ways the land should be managed. The planning process lets

the public know what choices were made and why. Decisions are made on a comprehensive basis, rather than case by case. This provides consistency and consideration of all resources and uses for the whole planning area.

Title 38 of the Alaska Statutes requires preparation of land use plans for state land. Once a plan is adopted, permits, leases, land sales, cooperative agreements, and other DNR land management actions will be based on that plan. With a plan, state review processes for these actions become more efficient for both the government and the public.

Description of the Planning Area

Land Status. The Northwest Planning Area includes the Lisburne Peninsula up to Icy Cape, Kotzebue Sound and the Kobuk River Valley, the Seward Peninsula, and Norton Sound. Approximately one-fourth of the land within this area, or about 11 million acres of uplands and about 5 million acres of tide, shore and submerged lands, has been selected by or is owned by the state.

Federal land within the planning area is administered by the Bureau of Land Management

or lies within the following conservation units: Cape Krusenstern National Monument, Kobuk Valley National Park, Bering Land Bridge National Preserve, Selawik National Wildlife Refuge, and portions of the Noatak National Preserve, Gates of the Arctic National Park and Preserve, and the Alaska Maritime National Wildlife Refuge. Alaska Native Claims Settlement Act (ANCSA) regional and village corporations own or have selected over 10.9 million acres within the planning area. In addition, about

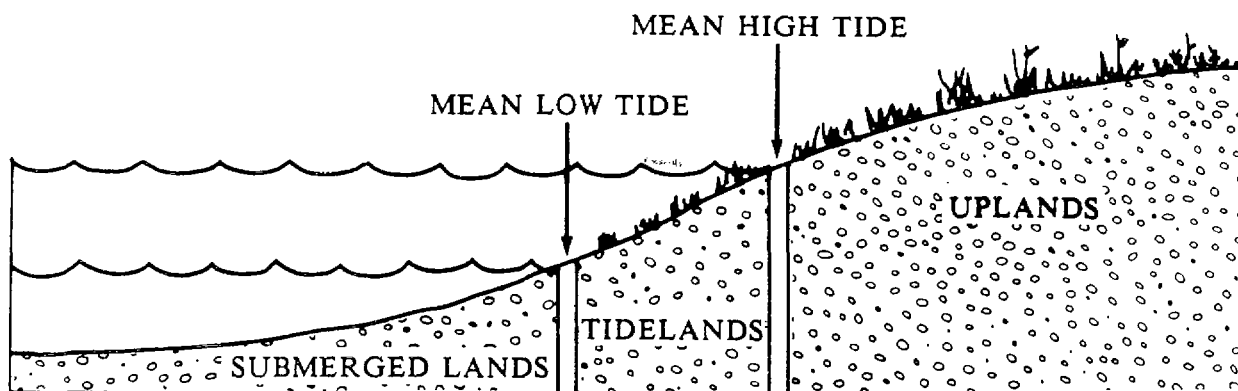
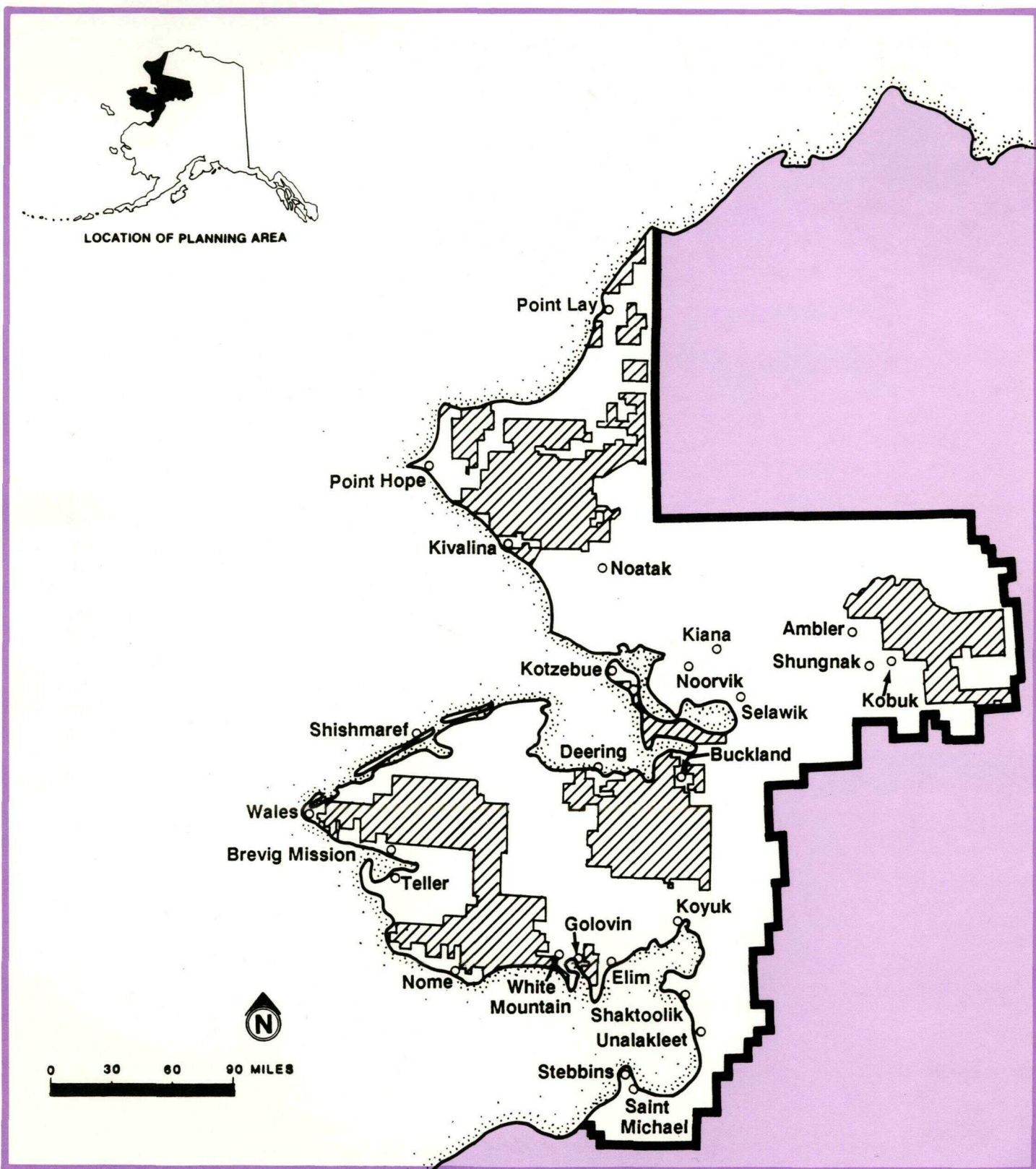


Figure 1-1. Tidelands include the land between mean high and mean low tide. Submerged lands are seaward of mean low tide. The state owns almost all tidelands in the Northwest Area Plan and owns the submerged lands out three miles from shore. In this plan, the word "tidelands" is used to include both tidelands and submerged lands.

THE NORTHWEST PLANNING AREA



Detailed land status is not shown because of the complex land ownership pattern and the small scale of the map. Some private lands and Native-selected land exists within the areas shown. More detailed land ownership maps are shown in Chapter 3 and are available at the DNR office.

280,000 acres in 2,300 parcels have been selected or patented under federal land conveyance programs, including Native allotments, mineral patents, and homesites. The planning area does not include state-owned tide or submerged lands around islands more than 3 miles offshore.

Physiography. The planning area has many diverse physiographic regions. The arctic coastal plain, Brooks Range foothills, and De Long Mountains make up most of the northern portion. The Baird Mountains and lowlands along the Noatak, Kobuk, Selawik, and Buckland rivers cover the central portion. The southern portion includes the Seward Peninsula, the Yukon-Kuskokwim coastal lowlands of lower Norton Sound, and the Nulato Hills. The Kobuk, Noatak, and Selawik Rivers are the three major river systems within the region that drain into Kotzebue Sound. Other large rivers include the Kukpuk, Buckland, Kuzitrin, Niukluk, Koyuk, and Unalakleet rivers.

The Chukchi Sea coast, from Icy Cape to Cape Lisburne, is predominantly composed of barrier islands; from Cape Lisburne to Cape Thompson, the sea coast is dominated by the Point Hope spit, bounded on the north and south by high sea cliffs. From Cape Thompson to Cape Krusenstern, the coast is primarily erosional, interspersed with a few lagoons and short barrier beaches, and has narrow beaches and low cliffs. Kotzebue Sound, from Cape Krusenstern to Cape Espenberg, is a shallow, sediment-filled embayment.

The north coast of the Seward Peninsula, from Cape Espenberg to Cape Prince of Wales, consists of lagoons and barrier islands. No major rivers drain into the sea in this region, although, smaller rivers drain into the Arctic and Shishmaref lagoons. The coast of Norton Sound from

Cape Prince of Wales to St. Michael has narrow beaches with steep terrain.

Communities. The 26 communities within the Northwest Planning Area have a total population of about 14,000 (see Appendix F). Most of the communities have a subsistence economy or a mixed subsistence-cash economy. Seasonal jobs in government, construction, fisheries, transportation, reindeer herding, and tourism provide most cash income. To a lesser extent, cottage crafts (such as ivory carvings, jewelry, basketmaking, and skin-sewn garments) also provide some income. A high percentage of residents supplement cash income with subsistence activities. Hunting, fishing, berry picking, plant gathering, and timber harvesting provide food, fuel, clothing, and building materials for residents.

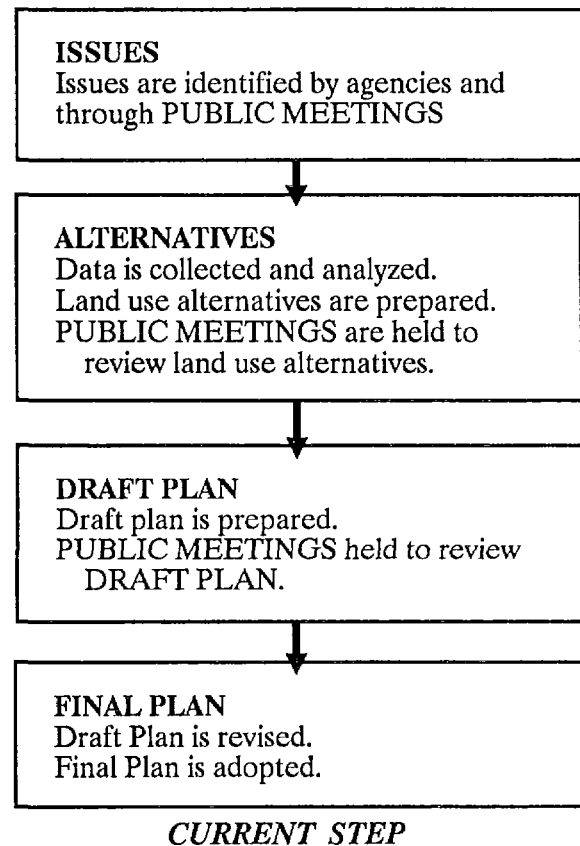
Extended families and kinship systems are the cornerstone of the mixed subsistence-cash economy and allow for the efficient production and distribution of store-bought and subsistence goods. Though the regional economy is partly based on development and extraction of local resources, the entire planning region is expected to continue its dependency on a subsistence economy for the next 20 years.

Access. Access to the planning area is by commercial flights to the regional centers of Kotzebue, Barrow, and Nome and by small commuter flights within the area. Local residents commonly use an extensive winter trail system for travel to neighboring villages and important hunting, fishing, and trapping areas. In the summer, boats are used along the coast and major rivers, and within lagoon areas.

How Was the Plan Developed?

The Northwest Area Plan is the product of three and a half years of work by the planning team, interest groups, and the general public. The planning team consists of 18 representatives from state agencies, coastal programs, local governments, and ANCSA corporations. (For a listing of agencies and organizations represented on the team, see page i and ii.) Over 75 public meetings and workshops have been held throughout the planning area and in Anchorage and Fairbanks to gather public comments and ideas (see Figure 1-2).

Figure 1-2 The Planning Process



Public Participation

Private citizens, private organizations, local councils, and other local, state, and federal agencies took part in the process by attending public meetings, by participating in working groups and planning team meetings on specific issues, and by submitting written and oral comments. The general public was informed of planning activities through periodic newsletters. Three rounds of public meetings were held before the plan was completed. The first series of 26 public meetings was held in October and November of 1985 to identify general issues and concerns. Relevant resource data was collected and

analyzed. Land-use alternatives and management proposals were developed from these issues and data. A brochure explaining these alternatives and proposals was mailed to over 1,000 people in March of 1987. Twenty-six public meetings were held to solicit comments on the plan alternatives in March, April, and May of 1987. Comments on the alternatives were used to prepare the draft plan. A final round of public meetings was conducted in the fall of 1988 to collect comments on the draft plan. Summaries of public comments are available from DNR (see Appendix C).

Summary of Plan Implementation

The policies, management guidelines, and land-use designations of the Northwest Area Plan will be implemented through administrative actions such as land sales, leases, permits, land selections and relinquishments, interagency memoranda of agreement, cooperative agreements with other landowners, research, classification orders, and mineral closing orders. In addition, DNR and Alaska Department of Fish and Game (DF&G) may make recommendations to the state legisla-

ture on legislative designations or changes in legislation consistent with the plan.

Land classification orders and mineral closing orders have been prepared for state land in the planning area. These orders are the formal record of the primary uses allowed on state lands and are recorded on state status plats. The final plan serves as the final finding for the state land classifications and mineral orders included in the plan.

Summary of How to Change the Plan

Economic and social conditions in Alaska and in the Northwest Planning Area will change, and the plan must be flexible enough to change with them. Three ways to modify the plan are amendments, minor changes, and special exceptions. The Northwest Area Plan will be reviewed every five years (approximately) to determine if revisions are required. In addition to the regularly scheduled review of the full plan, specific modifications may be made any time that conditions warrant. Substantive changes to the plan can be made by amendment when approved by

the Commissioner of DNR, with public review and consultation with affected agencies. A minor change to the plan that does not change the basic intent of the plan, such as correcting a technical error, does not require public review. Special exceptions to the plan can occur when compliance is impossible or impractical. A request for a special exception must follow procedures in Chapter 4, *Procedures for Plan Modification and Amendment*.

Statewide Goals

This plan is designed to balance competing interests in state lands in the Northwest Area and to contribute to DNR's statewide goals in a manner appropriate to the resources, economy, and communities of the area. The six statewide goals are

1. Economic Development. Provide jobs and income through the management of state land and resources to support a vital, self-sustaining local and statewide economy. Subsistence activities in Northwest Alaska are an important part of the local and regional economy.

2. Public Use. Provide diverse opportunities for public use of state land, including such uses as hunting, fishing, recreation, and firewood collection.

3. Private Land. Provide opportunities for private ownership of state land.

4. Quality of Life. Maintain or enhance the quality of the natural environment and cultural resources, and the character of existing communities.

5. Fiscal Costs. Minimize the cost of providing necessary government services and facilities, such as state land management programs, schools, and transportation facilities.

6. Public Safety. Protect public safety, for example through avoiding development in areas of natural hazards.

The policies, land use designations, management guidelines, and implementation actions in this plan describe the way resources in the Northwest

Area will be managed to contribute to these goals.

Summary of Changes to Major Plan Proposals in the Alternatives and Draft Plan

The main provisions of the plan and the reasons for decisions are summarized in the remainder of this chapter. Chapters 2, 3, and 4 are the detailed descriptions of these actions.

Subsistence

From the first planning team meeting for the Northwest Area Plan, subsistence concerns were identified as one of the most important issues the plan should address. Subsequent public meetings and comments on alternatives emphasized these concerns. Many concerns expressed at public meetings were fishing and hunting allocation issues, which cannot be addressed by DNR. The boards of Fisheries and Game determine allocation for harvest, and DF&G manages the fish and wildlife species. DNR manages the habitat and the access to the habitat.

A cooperative subsistence mapping project was undertaken by DNR and DF&G's Subsistence Division for many communities in the planning area. The maps showed the areas of harvest for each fish and wildlife species, by community. A background resource report on subsistence was prepared for the plan, based on the DF&G Habitat Management Guides section on subsistence, with input from a special working group. Information from the subsistence maps and report was used throughout the plan.

The plan has addressed subsistence concerns in several significant ways. The plan recognizes subsistence needs by retaining over 99 percent of state lands in public ownership and managing for multiple uses, including subsistence. The plan also requires that subsistence activities be addressed when managing this state land for multiple uses. A special set of guidelines for *Subsistence Activities and Traditional Uses* is found in Chapter 2 of the plan, page 2-43. These and other plan policies assure that development

activities will occur with a minimum of impact to the mixed cash-subsistence economy of the region.

Grazing

Reindeer herding is one of the oldest, most continuous, and most successful forms of agriculture in Northwest Alaska. It is a major economic activity on most of the Seward Peninsula. Reineer rangeland is multiple use land -- it supports fish and game populations, wild berries and other edible plants, mineral exploration and extraction, and recreational use.

Early in the planning process, it was recognized that existing DNR grazing guidelines did not adequately address the Northwest Alaska situation, especially the practice of grazing reindeer on land split among several ownerships. New management guidelines were written to provide opportunities for continued grazing of reindeer and other livestock on state land while affording this state land proper protection for other uses. These guidelines call for multiple use management of state land with grazing potential. The guidelines include protection of public access and public use of this land, protection of important wildlife habitat, and establishing mechanisms for developing grazing operations plans and issuing grazing permits on a longer-term basis.

The complex land ownership pattern that exists in Northwest Alaska necessitates a coordinated application process for grazing authorizations. Grazing operations plans should become an essential component of grazing authorizations. Plans will be coordinated by the Alaska Soil and Water Conservation District through a cooperative effort between the applicant (herder) and the affected land owners. Technical assistance will be provided by the U.S. Soil Conservation Service. The grazing operations plans should

improve management of reindeer herding, and the coordinated application process should simplify the management requirements of the herder and landowners.

Land Sales

The Alaska Constitution and statutes require that some state land be offered for sale. Statewide public interest in acquiring land through state disposal programs is strong. The Northwest Area Plan determines which lands will be offered for private ownership in the area over the next 20 years.

During the alternatives stage, up to 1,900 acres in six areas were proposed to be offered for private ownership over the next 20 years. Of these six areas, three were along the road system north of Nome and three were on tributaries of the upper Kobuk River. The alternatives noted that offerings within the Northwest Arctic Borough would be deferred for five years or until the borough completes its comprehensive plan, whichever comes first.

The three land-sale areas identified in the alternatives for the upper Kobuk River Valley were Mauneluk River, Kollioksak Lake, and Pah River. Public comment from local residents overwhelmingly opposed land offerings in the Kobuk River Valley. The greatest concern expressed was the conflict of land sales with the current and long-established subsistence uses in these areas. Encouraging settlement in an area already feeling the impacts from incoming recreation users was also a great concern. DF&G initially expressed strong opposition to the Pah River land-sale area and documented that all three proposed land-sale areas were within joint-use areas for the communities of Ambler, Shungnak, and Kobuk. The NANA Regional Corporation and Northwest Arctic Borough adamantly opposed land sales within their region. Support from outside the region was low. The planning team amended the draft plan proposal by dropping the most contested land sale area (Pah River) and noted that the borough can select the remaining sale areas as part of its municipal entitlement. If the land sale areas were selected and conveyed to the borough, management of that land would be decided by borough policies and plans. The plan

defers land sales in the Kobuk River area for five years or until the borough's comprehensive plan is complete, whichever comes first.

Three land-sale areas identified in the alternatives for the Seward Peninsula were near Bunker Hill, Grand Central River, and Pilgrim River. Public and agency comments opposed the Bunker Hill area because of high wildlife habitat values, reindeer grazing, recreation uses, and subsistence use of the area. Similarly, concerns were strongly expressed about disposing lands along Pilgrim River. In response to these concerns, the planning team dropped the Bunker Hill area and modified the Pilgrim River area by identifying a staking setback area 1/4-mile from the river. To provide a reasonable level of offering on the Peninsula, the team considered an additional site along the Nome-Council road and another near Sinuk River. However, after field inspections and a workshop with local representatives, these two sites were dropped. The public review draft proposed enlarging the Grand Central land-sale area, adding an area near Christian Creek south of Grand Central. The draft plan also proposed adding an area near Golden Gate Creek north of the Pilgrim land-sale area, and offering the modified Pilgrim River area.

During the draft plan review for the proposed Seward Peninsula land sales, comments showed that Nome residents strongly favored more land sales in the Nome area, but felt that the Grand Central area was too important for recreation and wildlife habitat to be offered for sale. Most people in support of sales opposed the subdivision offering, and preferred a more dispersed offering. Fewer people opposed any of the other proposed land sales on the Seward Peninsula, but several comments stressed that the Pilgrim River and Golden Gate areas were important wildlife habitat.

In response to these comments, land sale areas on the Seward Peninsula have been changed. The northeast portion of the proposed Grand Central sale area in the Grand Central River Valley was dropped. The remainder of the Grand Central and Christian Creek sale areas were joined into a dispersed offering of 65 homesteads. Ten homestead parcels will be offered in the Pilgrim area, and 15 parcels will be offered in the Golden Gate area. Each parcel will be up to

ten acres in size, giving a total of 900 acres for sale on the Seward Peninsula.

In addition to the usual public and agency review, the plan requires that Bering Straits Coastal Resource Service Area, Bering Straits Native Corporation, and the Division of Mining be consulted

about the design of the revised Seward Peninsula land sales.

The following table summarizes the areas proposed for land sales during the alternatives stage, the public review draft, and the final plan.

Table 1.1 Land Disposal Areas in the Alternatives, Draft, and Final Plan

Subregion/Unit	NET ACREAGE*		
	Alternatives	Public Review Draft	Final Plan
Kobuk River/Unit 3			
Kollioksak Lake	100-200	100-200	100-200
Mauneluk River	75-150	75-150	75-150
Pah River	50-150	0	0
Subtotal	225-500	175-350	175-350
Seward Peninsula/Unit 5			
Bunker Hill	200-400	0	0
Grand Central River	200-400	300	0
Christian Creek	0	100	650
Pilgrim River	200-600	400	100
Golden Gate Creek	0	100	150
Subtotal	600-1400	900	900
TOTAL	825-1900	1075-1250	1075-1250

*Net acreage is the amount of land that will actually be transferred to private ownership.

Leases and Permits

Public comments on alternatives indicated a reluctance to support leases and permits on state land, mainly because of concerns that issuing leases and permits would increase pressure on subsistence resources. Many people wanted local residents consulted before issuing permits in traditional use areas.

DNR may issue permits for some temporary uses of state land, such as trapping cabins and commercial tent camps. DNR may also issue leases for more permanent uses of state land, such as lodges or communication sites. The Northwest Area Plan will continue to allow leases and permits in most of the planning area. Leases for commercial recreation facilities will not be allowed in certain habitat areas (see *Public and Commercial Recreation* guidelines, page 2-22).

Trapping cabin construction permits should not be issued if the cabin conflicts with existing trapping and subsistence activities. Each request will be reviewed for compliance with the plan's management guidelines and policies.

Under plan guidelines for *Coordination and Public Notice*, page 2-5, community and public notice will be given for all trapping cabin construction permits, exclusive use permits, reindeer grazing permits, and authorizations requiring notice under A.S. 38.05.945, such as land sales, remote cabins, and oil and gas lease sales. The plan lists organizations to be notified, including city offices, IRA and traditional councils, and ANCSA corporations. Guidelines for *Subsistence Activities and Traditional Uses*, page 2-43, offer additional measures to avoid conflicting resource uses.

Minerals

Currently, almost all state land in the region is open to mineral entry. Many areas in Northwest Alaska were selected by the state for their mineral potential. The Northwest Area Plan closes certain areas to new mineral entry where mining would conflict with other resource values and the impacts cannot be mitigated.

The alternatives proposed leaving most state land open to new mineral entry, using guidelines to minimize impacts on resources and uses. Certain especially sensitive areas, such as seabird rookeries and sheefish spawning areas, would be protected through mineral closures. Support for the proposal was mixed: strongest support came from outside the plan area; within the plan area, Seward Peninsula respondents favored the proposal more than did Northwest Arctic Borough residents. Comments opposing the proposal (43 percent of respondents) indicated widespread concern over the potential impact of mining activities on spawning areas, water quality, fish and wildlife resources, and ultimately, on the subsistence lifestyle of area residents.

Two areas of concern were identified in the draft plan for possible closure to new mineral entry: important seabird rookeries along the coast and sheefish spawning areas on the upper Kobuk River. Most public comment supported these closures. The plan closes these site-specific areas: within a quarter-mile radius of 13 seabird

rookeries on state uplands, and on tidelands with high mineral or coal values; and at 7 sheefish spawning areas and adjacent state lands within 200 feet on either side of ordinary high water. Lands in the five areas offered for disposal (see **Land Sales** in this chapter) will be closed to mineral entry prior to sale.

Besides mineral closure, other measures will mitigate potential mining impacts on fish, wildlife, habitat, water quality, and subsistence uses. These are outlined in the areawide land management policies in Chapter 2. *Fish and Wildlife Habitat* guidelines (page 2-6) mitigate impacts on anadromous stream mouths and seabird colonies, and address the impacts of mining. *Stream Corridors and Instream Flow* guidelines (page 2-39) for habitat and water quality, and *Subsurface Resources* guidelines (page 2-45) for environmental quality and cultural values also address the impacts of mining activity.

National Guard Training Areas

The Department of Military and Veterans Affairs (DMVA) is interested in using state land in the Northwest Area for a National Guard military training area. The plan alternatives asked for opinion on two areas for military training. At the public meetings, four additional areas were proposed. Public comments generally opposed all proposals, although mixed support existed in some communities, particularly on the Seward Peninsula. The planning team did not recommend any military training areas. DNR has advised the DMVA of this information, and has requested that they hold meetings in any affected communities to review their resultant proposal. Proposals for military training areas on state land will require an authorization from DNR that will be in compliance with Northwest Area Plan policies and consistent with appropriate coastal plan policies.

Oil and Gas

In the Northwest Area, oil and gas resources have a low to moderate potential. The Northwest Area Plan addresses general concerns about balancing oil and gas development activities with other uses. The oil and gas proposal

in the alternatives--that all state lands could be available for oil and gas leasing under the five-year leasing process and that lease sales will be coordinated with approved coastal management plans--received support from over half of the respondents. Opponents expressed concern about coordination of oil and gas lease sales with approved coastal management plans. Other comments expressed concern about protecting subsistence resources.

Management policies of the Northwest Area Plan will be consistent with the approved coastal management plans for the area. State oil and gas lease sales in the area will be closely coordinated with these plans to assure compliance. The public will be informed of lease sale plans and will have the opportunity to comment on them through the Division of Oil and Gas public outreach program. Through the outreach program and numerous guidelines established in the plan, impacts on subsistence resources will be mitigated.

Public-Use Cabins

The state's public-use cabin program allows people to rent a cabin for hunting, fishing, and general recreational use. The Northwest Area Plan considered areas for public-use cabins.

Five areas--Noatak River, Wulik River, Kobuk River, Lake Minakokosa, and Niukluk River--were proposed for public-use cabins in the alternatives because of their high profile as recreation areas. Most comments opposed recommending these areas for public-use cabins. The comments did express a preference for campsites over cabins, but voiced concern that encouraging more use in the area would create more competition for the resources.

The planning team dropped the recommendations for public-use cabins, but retained those areas in public ownership and reflected their high recreation values in the management intent for specific management units.

Remote Cabins

The state can issue 25-year permits to individuals to build cabins on scattered sites in remote areas. The Northwest Area Plan decides what areas in

the planning area will be open for remote cabin permits and how many remote cabins will be allowed in each area.

The alternatives proposed opening five areas to remote cabin permits: Noatak River, Ambler River, Lake Minakokosa, Norutak Lake, and the lower Mauneluk River. No areas were identified on the Seward Peninsula because of the difficulty in finding suitable areas of state land more than the required ten miles from road access. Public comments from the Northwest Arctic Borough adamantly opposed offering remote cabins because of the conflicts with subsistence activities of Noatak, Kobuk, Ambler, and Shungnak.

In response to concerns in the Northwest Arctic Borough, the planning team dropped the remote cabin areas in the highest use areas--Noatak River, Ambler River, and Mauneluk River--for the draft plan. An area was added at Reed River to sustain a reasonable range of opportunity for cabin sites while minimizing the likelihood of conflict with other uses. The locations and number of remote cabins proposed in the draft plan were Lake Minakokosa (2 cabins), Norutak Lake (3 cabins), and Reed River (2 cabins). Additionally, these offerings for remote cabin permits would be deferred for five years, or until the borough's comprehensive plan is complete, whichever comes first.

Initially, most of the comments from the Seward Peninsula, particularly from Nome, supported the remote cabin program and questioned the lack of areas identified on the Seward Peninsula. The draft plan proposed adding four areas: Upper Koyuk River (2 cabins), Casadepaga River (19 cabins), Sinuk River (2 cabins), and Upper Bonanza and Eldorado Rivers (2 cabins).

Most of the comments about remote cabins proposed in the draft plan opposed any remote cabins in the planning area. People felt that the cabins would increase actions that harm subsistence resources and reindeer grazing. Some felt that access to the cabins would be a problem. Another concern was that it would be hard for local residents to get a remote cabin site. In the Nome area, where demand for land is greater, people felt that permits should be issued for more than 25 years. Comments strongly opposed cabins in the Casadepaga River area and the Eldorado/Bonanza areas, but some were in favor

of cabins in the Sinuk River and Koyuk River areas.

The planning team decided to drop the Eldorado/Bonanza River and Casadepaga River remote cabin areas, and to increase the Sinuk River area to 4 cabins and the Koyuk River area to 10 cabins. In response to overwhelming op-

position to cabin offerings in the Northwest Arctic Borough, the remote cabin areas also were dropped at Lake Minakokosa, Norutak Lake, and Reed River. Table 1.2 shows the areas proposed for remote cabins during the alternatives stage, the public review draft plan, and the final plan.

Table 1.2 Remote Cabin Areas in the Alternatives, Draft, and Final Plan

Subregion/Unit	NUMBER OF CABINS		
	Alternatives *	Public Review Draft	Final Plan
Kobuk River Valley			
Unit 2 - Noatak River	some	none	none
Unit 3 - Ambler River	some	none	none
Lake Minakokosa	some	2	none
Norutak Lake	some	3	none
Mauneluk River	some	none	none
Reed River	none	2	none
Subtotal	some	7	none
Seward Peninsula			
Unit 5 - Casadepaga River	none	19	none
Bonanza/El Dorado	none	2	none
Sinuk River	none	2	4
Unit 6 - Upper Koyuk River	none	2	10
Subtotal	none	25	14
TOTAL	some	32	14

*Proposed remote cabins at low density, no numbers specified.

Municipal Entitlement

The Municipal Entitlement Act (AS 29.65) establishes land classification categories that determine a municipality's general grant land entitlement. The Northwest Area Plan classifies state land within the planning area boundaries

(see Chapter 4, *Land Use Classifications*). When a municipality incorporates under state law, it may select land within its boundaries that, except for classification, otherwise meets the definition of vacant, unappropriated, unreserved land under AS 29.65. Settlement of municipal entit-

lement is a high priority for DNR, and the current classifications of the plan will not preclude considering parcels of land for reclassification and transfer to a municipality. See the discussion in Chapter 4, *Municipal Entitlement*, for further details.

The Northwest Arctic Borough was established in 1986, one year after the beginning of the Northwest Area Plan. Two major issues arose as a result of the creation of the new borough: municipal entitlements and local planning powers. The borough was concerned that the Northwest Area Plan not restrict its land selection options. Additionally, legislation in 1987 allowed new entitlement for the North Slope Borough. To facilitate land transfer to the boroughs, DNR will defer classification of preliminary areas of interest for borough selection until the borough selections are formally submitted. Following receipt of the selections, land not selected by the boroughs will be classified according to the plan designations in the management units. Designations are listed in Chapter 4, *Land Use Classifications*. Before any transfer to municipal ownership, the land will be reviewed for state interests.

The Northwest Arctic Borough is beginning work on its comprehensive plan. When the comprehensive plan is completed and adopted, DNR will comply with the provisions of that plan. The issue of particular concern to the borough is settlement activity that may increase competition for resources or create additional land use conflicts. DNR will defer offerings of land sales for five years, or until the borough's comprehensive plan is complete, whichever comes first.

Coastal Management Programs

The Alaska Coastal Management Program (ACMP) was established by the legislature in 1977, under Alaska Statute 46.40. Regulations implementing the program are found in the Alaska Administrative Code (6 AAC 50, 6 AAC 80, and 6 AAC 85). The ACMP regulations include standards that apply to all land uses in the coastal zone. All permits, leases, and sales of state land within the coastal zone must be consistent with those standards in the state program.

The policies of the Northwest Area Plan for state land within the coastal zone must be consistent with state coastal management standards and with any approved district programs. Four coastal districts exist within the Northwest Planning Area. The North Slope Borough and the City of Nome have received approval from both the Alaska Coastal Policy Council (CPC) and the federal Office of Coastal Resource Management (OCRM). Although not yet approved by the federal OCRM, the Northwest Arctic Borough and Bering Straits Coastal Resource Service Area (CRSA) Coastal Management Plans have been approved by the state's CPC, and articulate state policy. State agencies have been instructed to honor these plans in making decisions.

DNR has worked with planning team representatives from each coastal district to insure that Northwest Area Plan policies are consistent with coastal plan policies. Additionally, districts with approved programs review most of DNR's decisions within their boundaries to determine their consistency with the district plan. In addition, if proposed activities on state land outside their boundaries would significantly affect resources within the district, then DNR must notify the district of the proposed activities.

CHAPTER 2

Areawide Land Management Policies

	page
Introduction	2-1
List of Guidelines	2-1
Coordination and Public Notice	2-5
Fish and Wildlife Habitat	2-6
Forestry	2-10
Grazing	2-12
Heritage Resources	2-14
Lakeshore Management	2-15
Materials	2-17
Public Access	2-20
Public & Commercial Recreation	2-22
Remote Cabins & Trapping Cabins	2-25
Settlement	2-28
Shoreline Development	2-37
Stream Corridors and Instream Flow	2-39
Subsistence Activities and Traditional Uses	2-43
Subsurface Resources	2-45
Trail Management	2-53
Transportation and Utilities	2-56
Wetlands Management	2-59



Front Street, Nome

Chapter 2

AREAWIDE LAND MANAGEMENT POLICIES

Introduction

This chapter presents land management policies for each of the major resource or land use categories affected by the plan: fish and wildlife habitat, forestry, grazing, materials, recreation, settlement, subsistence, subsurface, and transportation. The chapter also presents management policies for several specific land management concerns: coordination and public notice, heritage resources, lakeshore management, public access, shoreline development, stream corridors, instream flow, remote cabins, trapping cabins, trail management, and wetlands management. These policies apply to state land throughout the region, regardless of the land use

designation. In addition, this chapter summarizes the land allocations for each major resource.

The policies in this chapter consist of goals and management guidelines. Goals are the general condition the department is trying to achieve, and the guidelines are specific directives that will be applied to land and water management decisions as resource use and development occur.

Definitions of the terms commonly used in this chapter are located in Appendix A.

List of Guidelines

	Page		Page
COORDINATION AND PUBLIC NOTICE	2-5	F. Threatened and Endangered Species	2-7
A. Coordination of Upland Owner and Tideland Applicant	2-5	G. Tundra Swan Nesting Areas	2-7
B. Coastal Plan Coordination	2-5	H. Avoid Conflicts With Traditional Uses of Fish and Game	2-8
C. Community Notice	2-5	I. Avoid Creating Nuisance Animals	2-8
D. Federal CSU Notice	2-5	J. Mouths of Anadromous Streams and Enclosed Estuaries	2-8
FISH AND WILDLIFE HABITAT	2-6	K. Seabird Colonies and Marine Mammal Haulouts	2-8
A. Mitigation	2-6	L. Reindeer Herd Management and Overwintering Moose	2-8
B. Activities in Important Waterfowl Habitat.....	2-7	M. Habitat Manipulation	2-8
C. Structures in Fish Habitat	2-7	N. Management of Trapping Cabins	2-8
D. Water Intake Structures	2-7		
E. Water Withdrawal in the Winter	2-7		

	Page		Page
FORESTRY	2-10	E. Screening and Rehabilitation	2-18
A. Timber Salvage	2-10	F. Mouths of Anadromous Streams and Enclosed Estuaries	2-18
B. Forest Practices Act	2-10		
C. Wood Harvest for Personal Use	2-10	PUBLIC ACCESS	2-20
D. Fire Management	2-10	A. Retain Access	2-20
GRAZING	2-12	B. Reserve Rights of Access	2-20
Management Guidelines for Reindeer and Other Livestock.....	2-12	C. Acquire Access	2-20
A. Multiple Use Management of Lands with Grazing Potential	2-12	D. Establish and Maintain Easements	2-20
B. Public Access and Public Use of State Lands	2-12	E. Assert Rights-of-Way	2-20
C. Grazing On Important Habitat Lands	2-12	F. Management of 17(b) Easements	2-20
D. Wildlife Conflicts	2-12	G. Coordination With the Department of Transportation and Public Facilities (DOT&PF)	2-20
E. Guidelines for Livestock Other Than Reindeer	2-12	H. Managing Access	2-20
Management Guidelines for Reindeer	2-12	I. Provide Access from Staging Areas	2-20
A. Grazing Authorizations	2-12	J. Community Notice	2-20
B. Grazing Operations Plan	2-12	K. Provision of Access Within Land Sale Areas	2-20
HERITAGE RESOURCES	2-15		
A. Heritage Resource Identification	2-15	PUBLIC AND COMMERCIAL RECREATION.....	2-22
B. Heritage Resource Protection	2-15	A. Shelter Cabins	2-22
LAKESHORE MANAGEMENT	2-15	B. Permanent Commercial Recreation Facilities on State Land	2-22
A. Land to be Retained	2-15	C. Temporary Commercial Recreation Facilities on State Land	2-23
B. Management of Lakeshore Buffers	2-15	D. Commercial Recreation	2-23
C. Establishing Widths of Easements and Setbacks	2-15	E. Optimum Use of Sites	2-23
D. Structures in Fish Habitat	2-15		
E. Water Intake Structures	2-15	REMOTE CABINS AND TRAPPING CABINS.....	2-25
MATERIALS	2-17	Management Guidelines For Remote Cabins	2-25
A. Preferred Material Sites	2-17	A. Minimize Conflicts	2-25
B. Material Extraction From Floodplains	2-17	B. Fire Protection	2-25
C. Maintaining Other Uses and Resources When Siting and Operating Material Sites	2-18	C. Spacing Cabins	2-25
D. Land Sales in Areas of High Material Potential	2-18	D. Legal Access	2-25
		E. Buildings, Density, and Specific Guidelines	2-25
		F. Type of Interest in Land	2-26
		G. Rights-of-Way ³¹ H.Mineral Entry	2-26
		I. Avoid Conflicts with Traditional Uses of Resources.....	2-26
		J. Use of Remote Cabins for Trapping.....	2-26

	Page		Page
Management Guidelines for Trapping Cabins.....	2-26	F. Uses Allowed in Easements, Setbacks, and Publicly Owned Stream Buffers	2-41
A. Permits and Community Practices	2-26	G. Alteration of the Hydrologic System	2-41
B. Distance Between Trapping Cabins	2-26	H. Alteration of Floodplains	2-41
C. Minimize Conflicts	2-26	I. Soil Erosion	2-41
D. Avoid Conflicts With Traditional Uses of Resources	2-27	J. Structures in Fish Habitat	2-41
SETTLEMENT	2-28	K. Water Intake Structures	2-41
A. Planning and Coordination	2-29	L. Protection of Life and Property	2-41
B. Types of Offerings	2-30	Management Guidelines for Instream Flow	2-41
C. Protection, Management, and Enhancement of Other Resources	2-30	A. Stream Uses to Consider for Instream Flow Reservations	2-41
D. Design	2-31	B. Priorities	2-41
SHORELINE DEVELOPMENT	2-37	C. Process for Determining Reservations	2-41
A. Solid Breakwater, Jetty, or Causeway Design	2-37	SUBSISTENCE ACTIVITIES AND TRADITIONAL USES	2-43
B. Pilings Preferable to Fill	2-37	A. Avoid Conflicts with Traditional Uses of Resources	2-43
C. Siting Breakwaters, Jetties, Causeways, Harbors and Marinas	2-37	B. Public Access For Subsistence and Traditional Uses	2-43
D. Use of Bulkheads	2-37	C. Wood Harvest for Personal Use	2-43
E. Bulkhead Design	2-37	D. Coastal Policies	2-43
F. Permanent Fuel Storage	2-37	E. Subsistence Activities and Traditional Land Uses	2-44
G. Temporary Berms, Pads, or Ramps	2-37	SUBSURFACE RESOURCES	2-45
H. Public Access Adjacent to Water Bodies	2-37	Locatable Mineral Development Guidelines	2-45
I. Clean-up Bonds	2-38	A. Lands Open to Mineral Entry	2-45
J. Avoid Conflicts with Traditional Uses of Resources	2-38	B. Reclamation of Mineral Land	2-45
STREAM CORRIDORS AND INSTREAM FLOW	2-39	C. Access for Mineral and Coal Development	2-45
Management Guidelines for Stream Corridors	2-39	D. Control of Visual Impacts	2-45
A. Priority of Public Uses in Stream Corridors	2-39	E. Approval of Plans of Operation	2-45
B. Retention of Publicly Owned Buffers as a Management Tool in Stream Corridors	2-39	F. Land Sales in Areas with Subsurface Resources	2-46
C. Retention of Access Easements as a Management Tool in Stream Corridors	2-39	G. Avoid Conflicts with Traditional Uses of Resources	2-46
D. Establishing Widths of Publicly Owned Buffers, Easements, and Setbacks Along Streams	2-40	Leasable Minerals Development Guidelines	2-46
E. Separation Between Waterbodies and Potential, Conflicting Uses	2-41	A. Coal Exploration and other Leasable Minerals	2-46

	Page		Page
B. Access for Mineral and Coal Development	2-46	TRANSPORTATION AND UTILITIES	2-56
C. Land Sales in Areas with Subsurface Resources	2-46	A. Identification of Potential Transportation Routes	2-56
Guidelines for Resource Values That May be in Conflict with Coal or Mineral Development	2-46	B. Access Plans for Land Offerings or Resource Development Projects	2-56
A. Background	2-46	C. Joint Use and Consolidation of Surface Access	2-56
B. Areas Closed to Mineral Entry	2-47	D. Protection of Hydrologic Systems	2-57
C. Leasehold Location Areas	2-48	E. Protection of Fish and Wildlife Resources	2-57
D. Coal Leasing	2-48	F. Road Pullouts	2-57
Oil and Gas Guidelines	2-48	G. Timber Salvage From Rights-of-Way ...	2-57
A. Exploration Techniques that Minimize Clearing	2-48	H. Off-Road Vehicle Activity	2-57
B. Removal of Abandoned Facilities	2-49	I. Roadless Areas	2-57
C. Pipeline Design	2-49	J. Other Design Standards	2-58
D. Worker Education	2-49	K. Siting Utilities	2-58
E. Oil and Gas Leasing	2-49	WETLANDS MANAGEMENT	2-59
TRAIL MANAGEMENT	2-53	A. Definition of Wetlands	2-59
A. Management of Trail Buffers	2-53	B. Retention of Wetlands and Land Adjacent to Wetlands	2-59
B. Buffer Widths for Special Trails	2-54	C. The Use of Restrictive Use Covenants, Public Access Easements, or Setbacks	2-60
C. Buffer Width for Regional and Local Trails	2-54	D. Establishing Widths of Covenants, Easements, and Setbacks	2-60
D. Management of Trail Setbacks	2-54	E. Defining Wetland and Wetland Buffer Boundaries	2-60
E. Identification of Trails	2-54	F. Permits for Dredge and Fill in State-Owned Wetlands	2-60
F. Management of Neighborhood Trails ...	2-54	G. Operation of Heavy Equipment in Wetlands	2-60
G. Trail Crossings	2-55		
H. Rerouting Trails	2-55		

COORDINATION & PUBLIC NOTICE

Goals

Coordination with Non-state Landowners. Coordinate the use of state land with that of private and other public land owners to provide for the optimal use, development, and protection of the resources of Northwest Alaska.

Public Participation. Provide to local governments, state and federal agencies, adjacent landowners, and the general public meaningful opportunities to participate in the process of making significant land-use decisions.

Management Guidelines

A. Coordination of Upland Owner and Tideland Applicant. Permit and lease applications for tideland activities that show the need for upland support facilities on the adjacent non-state uplands will not be approved unless there is a written agreement between the applicant and the upland owner approving the necessary use. The term of the lease or permit should not be longer than the term of the agreement between the applicant and the upland owner. If the applicant has not applied for the use of the adjacent uplands, the application must show how all necessary housing, warehousing, processing, and other associated uses will be accommodated on the tidelands.

B. Coastal Plan Coordination. DNR will adhere to the requirements in the Bering Straits, Northwest Arctic Borough, North Slope Borough, and City of Nome coastal management plans where they apply to state lands.

C. Community Notice. Public notice will be given for authorizations required under AS 38.05.945 or its equivalent, for activities such as land sales, remote cabins, and commercial leases. Community notice will be given for the same

authorizations as .945 notice, and for these permits: grazing, rights-of-way, trapping cabin construction, and exclusive use of sites. Agencies and organizations that receive .945 notice are explained in state law.

Agencies and organizations that receive community notice, by letter, are listed in Appendix B. Appendix B lists organizations and addresses to notify, by management unit, with key agency contacts for current mailing addresses. When setting deadlines for responses to proposed actions, DNR will recognize the extra time it takes mail to reach people in rural Alaska. People responding will be expected to be prompt when responding. If feasible, this notice and that required for coastal consistency determination should be coordinated so that affected communities and organizations can respond effectively.

D. Federal CSU Notice. DNR will notify the Superintendent of the appropriate federal conservation unit of any requests for permits, leases or other authorizations for use of state tide, submerged, or shorelands within the boundary of the unit, and will provide an opportunity for comment on these proposals.

E. Other Guidelines Affecting Coordination or Public Notice. Several other guidelines may affect coordination or public notice. For details of these guidelines, see the following sections of this chapter:

- Fish and wildlife habitat
- Heritage resources
- Public access
- Public and commercial recreation
- Remote cabins and trapping cabins
- Settlement
- Stream corridors and instream flow
- Subsistence activities and traditional uses
- Transportation and utilities

FISH & WILDLIFE HABITAT

Goals

Maintain and Protect Publicly Owned Habitat Base. Maintain in public ownership and protect the habitat values of sufficient suitable lands and waters to provide for the habitat needs of fish and wildlife resources necessary to maintain or enhance public use and economic benefits.

Ensure Access to Public Lands and Waters. Ensure access to public lands and waters, and where appropriate, promote or enhance public use and enjoyment of fish and wildlife resources. Access improvements should be designed to match the public use objectives for the area under consideration.

Mitigate Habitat Loss. When resource development projects occur, avoid or minimize reduction in the quality and quantity of fish and wildlife habitat.

Contribute to Economic Diversity. Protect and enhance fish and wildlife resources and habitats to contribute directly or indirectly to local, regional, and state economies through commercial, subsistence, sport, and non-consumptive uses, while working to achieve the economic development of other resources.

Management Guidelines

A. Mitigation. The following policy will apply where coastal district mitigation policy is not in effect for state lands. When issuing permits and leases or otherwise authorizing the use or development of state lands, the Department of Natural Resources will recognize the requirements of the activity or development and the benefits it may have to habitat when determining stipulations or measures needed to protect fish and wildlife or their habitats. The costs of mitigation relative to the benefits to be gained will be considered in the implementation of this policy.

All land use activities should be conducted with appropriate planning and implementation to avoid or minimize adverse effects on fish and wildlife or their habitats.

The departments will enforce stipulations and measures, and will require the responsible party to remedy any significant damage to fish and wildlife or their habitats that may occur as a direct result of the party's failure to comply with applicable law, regulations, or the conditions of the permit or lease.

When determining appropriate stipulations and measures, the department will apply, in order of priority, the following steps. Mitigation requirements listed in other guidelines in this plan will also follow these steps.

1. Avoid anticipated, significant adverse effects on fish and wildlife or their habitats through siting, timing, or other management options.
2. When significant adverse effects cannot be avoided by design, siting, timing, or other management options, the adverse effect of the use or development will be minimized.
3. If significant loss of fish and wildlife habitat occurs, the loss will be rectified, to the extent feasible and prudent, by repairing, rehabilitating, or restoring the affected area to a useful state.
4. DNR will consider requiring replacement or enhancement of fish and wildlife habitat when steps 1 through 3 cannot avoid substantial and irreversible loss of habitat. DF&G will clearly identify the species affected, the need for replacement or enhancement, and the suggested method for addressing the impact. Replacement or enhancement of similar habitats of the affected species in the same region is preferable. DNR will consider only those replacement and enhancement techniques that have either been proven to be, or are likely to be effective and that will result in a benefit to the species impacted by the development. Replacement or enhancement will only be required by DNR if it is determined to be in the best interest of the state either through AS 38.05.035(e) or permit review process. Replacement may include structural solutions such as creating spawning or rearing ponds for salmon, creating wetlands for waterfowl, or

non-structural measures such as research or management of the species affected, legislative or administrative allocation of lands to a long-term level of habitat protection that is sufficiently greater than that which they would have otherwise received, or fire management to increase habitat productivity.

B. Activities in Important Waterfowl Habitat.

In important waterfowl habitat, activities that require a permit, lease, or development plan and produce high levels of acoustical or visual disturbance from sources such as boat traffic, blasting, dredging, and seismic operations will, to the extent feasible and prudent, be avoided during sensitive periods. Where it is not feasible and prudent to avoid such activities, other mitigative measures will be considered to attempt to avoid significant impacts (see Guideline A above). The Department of Fish and Game (DF&G) will be consulted for assistance in identifying areas of important waterfowl habitat.

C. Structures in Fish Habitat. Structures in fish habitat will, to the extent feasible, be designed to minimize impacts on fish migration, spawning, and rearing.

D. Water Intake Structures. DNR will consult with DF&G before issuing appropriations for water. Water intake structures will be screened and intake velocities will be limited when deemed necessary by DF&G to prevent entrapment, entrainment, or injury to fish. Screen size, water velocity, and intake design will be determined in consultation with DF&G. Structures that support these intakes should be designed to prevent fish from being led into the intake.

E. Water Withdrawal in the Winter. Water withdrawal during winter months will, to the extent feasible and prudent, avoid fish overwintering areas.

F. Threatened and Endangered Species. All land use activities will be conducted consistent with state and federal Endangered Species Acts to avoid jeopardizing the continued existence of threatened or endangered species of fish or wildlife or their continued use of an area, and to avoid modification or destruction of their habitat. Specific mitigation recommendations should be identified through interagency consultation for any land use activity that potentially

affects threatened or endangered species. In Alaska, five bird species are listed under the jurisdiction of the U.S. Fish and Wildlife Service and Alaska Department of Fish and Game as threatened or endangered in accordance with state and federal Endangered Species Acts, as amended:

1. Arctic peregrine falcon (*Falco peregrinus tundrius*)
2. American peregrine falcon (*Falco peregrinus anatum*)
3. Aleutian Canada goose (*Branta canadensis leucopareia*)
4. Eskimo curlew (*Numenius borealis*)
5. Short-tailed albatross (*Diomedea alabatus*)

The Aleutian Canada goose and the short-tailed albatross are unlikely to be found in Northwest Alaska.

Activities that potentially affect bald and golden eagles will be consistent with the federal and state endangered species act and the Bald Eagle Protection Act of 1940 as amended.

The Fairbanks Fish and Wildlife Enhancement Office of the U.S. Fish and Wildlife Service should be consulted on questions that involve endangered species.

G. Tundra Swan Nesting Areas. In tundra swan nesting areas, all land use activities that would disturb nesting swans or detrimentally alter the nesting habitat will be avoided to the extent feasible and prudent. Where these activities are deemed feasible and prudent, they will be conducted to minimize disturbance to nesting swans or detrimental alteration of habitat. Leases or permits may include seasonal restrictions on activities to avoid disturbance to swans. Consultation with the DF&G will be used to identify current or potential nesting habitat and to determine guidelines to follow and activities to avoid.

Construction of transmission lines in trumpeter swan habitat should be avoided. If transmission lines are constructed, they should be sited in forested areas and kept close to treetop level; wires should be strung in one horizontal plane rather than in multiple, vertical stacks. Where lines cross rivers, marshes, and other open

spaces, they should be marked so that they are visible to swans.

H. Avoid Conflicts With Traditional Uses of Fish and Game. Where feasible and prudent, surface activities authorized under lease or permit will avoid significant conflicts with local subsistence harvests and other traditional uses of fish and wildlife resources. The expertise of local Fish and Game Advisory Committees and regional non-profit associations should be sought when making decisions on permits for trapping cabins, grazing, rights-of-way, exclusive use, or actions requiring notice under AS 38.05.945 (see *Coordination and Public Notice*, Guideline C, page 2-5).

I. Avoid Creating Nuisance Animals. Garbage associated with uses authorized under a lease or permit will be thoroughly incinerated or removed for disposal at an approved location to avoid creating nuisance animals that must be relocated or destroyed. Burning will be done consistent with Division of Forestry burning restrictions.

J. Mouths of Anadromous Streams and Enclosed Estuaries. Extraction of sand and gravel or recoverable minerals from an area within one mile offshore from the ordinary high water mark of anadromous fish streams, measured from their confluence with mean lower-low water or from within enclosed estuaries, such as lagoons, basins, and inlets, may be allowed only after the project applicant provides information demonstrating to DNR, DF&G, DEC, and the appropriate coastal district, that mining and related activities will avoid significant adverse impacts to anadromous fish and their habitat (see *Mitigation*, Guideline A, page 2-6).

K. Seabird Colonies and Marine Mammal Haulouts. Seabird colonies and walrus, sea lion, and seal haul-outs and rookeries will not be physically altered or disturbed in a manner that would preclude or significantly interfere with continued use of these sites. Development structures or facilities will not be allowed within one-half mile of these sites from April 15 through September 30. Land and water activities with high levels of acoustical or visual disturbance will, to the extent feasible and prudent, be prohibited

within: one mile of seabird colonies from April 15 through September 30; one-half mile landward and two miles seaward of walrus haulouts from May 1 through December 31; and one-half mile of seal haulouts from March 1 through September 30. These areas are shown on the management unit maps in Chapter 3. To date, no sea lion haulouts have been identified by DF&G in the planning area.

L. Reindeer Herd Management and Overwintering Moose. Authorizations for reindeer herding will be reviewed by DF&G to address limitations on herding activities in riparian moose winter habitats. The intent is to avoid conducting winter activities that will disturb moose and cause them unnecessary energy expenditures.

M. Habitat Manipulation. Habitat manipulation through controlled burning, water control, timber management practices, or other measures may be used to improve habitat for certain fish and wildlife species where feasible and compatible with other primary uses.

N. Management of Trapping Cabins. See *Trapping Cabin* Guideline A, p. 2-26.

O. Other Guidelines Affecting Fish and Wildlife Habitat. Several other guidelines may affect the protection and management of fish and wildlife habitat. See the following sections of this chapter:

- Coordination and public notice
- Grazing
- Forestry
- Heritage resources
- Lakeshore management
- Materials
- Public access
- Public and commercial recreation
- Settlement
- Shoreline development
- Stream corridors and instream flow
- Subsistence activities and traditional uses
- Subsurface resources
- Trail management
- Transportation and utilities
- Wetlands management

Land Allocation Summary

Although all lands, including lands in disposal areas, serve as fish or wildlife habitat and harvest areas to some degree, the most important habitat and public use lands will be retained in public ownership and managed to maintain fish and wildlife production and related public uses. Within the planning area, lands with the highest value for fish and wildlife habitat and harvest generally occur along the coast and along the navigable portions of major river systems that contain anadromous fish and important habitat for marine mammals, moose, bear, caribou, and furbearers.

Fish. Fish and wildlife habitat and harvest are identified as a primary use of state lands along most rivers, streams, and lakes with anadromous fish and important resident fish populations. To protect important sheefish spawning areas, seven segments of streambed and adjacent uplands will be closed to new mineral entry. Special guidelines apply to particularly important habitat areas, such as marine mammal haulouts and mouths of anadromous streams or enclosed estuaries.

Wildlife. State land in the planning area provides habitat for marine mammals, birds, moose, caribou, bear, Dall sheep, furbearers and other animals. These resources are used by people from throughout the state as well as outside of Alaska. Wildlife habitat is designated as a primary use on all lands important for wildlife habitat or used for hunting, except in areas identified for land disposals. Thirteen seabird rookeries and lands within a quarter-mile radius of these rookeries will be closed to mineral entry to protect this valuable habitat; one seabird rookery will not be available for coal leasing.

Eighteen subunits have been assigned wildlife habitat as the primary or co-primary designation:

Management Unit	Subunit
1. Lisburne	1a, 1c, 1e
2. Kotzebue Sound	2a, 2c, 2f
3. Kobuk	3b, 3d, 3g
4. Northwest Seward Peninsula	4a, 4c, 4f
5. Southwest Seward Peninsula	5a, 5c, 5g
6. Norton Sound	6a, 6c
7. Remnant Rivers	7

FORESTRY

Goals

Personal Use. Meet the personal use needs of people in the region within the productive capability of the land and limitations imposed by other important uses and resources.

Resource Management. Manage forests of the area to ensure long term productivity, continuous availability of forest products at reasonable cost, recognition and maintenance or enhancement of other public resources over the long term, and access for public use and enjoyment.

Protection from Destructive Agents. All forests in the area, private and public, will be protected from destructive agents, such as fire, insects, and disease, based on assessments of values at risk, benefits of fire, and protection costs in accordance with applicable laws, regulations, cooperative agreements, and fire management plans and this area plan.

Management Guidelines

A. Timber Salvage. Timber with commercial or personal use value should be salvaged from lands that will be cleared for other uses, such as transportation or utility corridors. This will be accomplished by adherence to the following guidelines.

1. For significant land clearing actions, the Division of Forestry will determine whether the timber is worth salvaging within the time frame of the proposed project. They will advise the Director of the Division of Land and Water Management on appropriate salvage methods.
2. Projects that involve clearing large areas of forested land will be planned far enough in advance to allow a reasonable period of time to conduct inventory and salvage of the timber.

B. Forest Practices Act. Guidelines for forest management in this plan assume compliance with the Forest Resources and Practices Act. That act and implementing regulations will guide timber harvest and regeneration and ensure the protection of non-timber resources. The guidelines in this plan apply to forest management in addition to those given by the Forest Practices regulations.

C. Wood Harvest for Personal Use. An important objective of forest management is to allow people to harvest house logs and firewood, including driftwood, from public land for their personal use. State land should be available for personal-use wood harvest, when consistent with management intent and guidelines for the unit (see also *Settlement* Guideline D-4, page 2-32).

D. Fire Management. Fire management practices, including prescribed burning, will be designed to be consistent with the land management policies stated in the area plan. These practices are described in the Alaska Fire Management Plans, which have been developed as part of the planning process for the Alaska Interagency Fire Management Council.

E. Other Guidelines Affecting Forest Management. Several other guidelines may affect forest management. See the following sections of this chapter:

- Coordination and public notice
- Fish and wildlife habitat
- Lakeshore management
- Materials
- Public access
- Settlement
- Stream corridors and instream flow
- Subsistence activities and traditional uses
- Subsurface resources
- Trail management
- Transportation and utilities
- Wetlands management

Land Allocation Summary

Timbered lands are located primarily along river valleys in the upper Kobuk River area and the southeastern portion of the Seward Peninsula. Most harvested wood comes from Native corporation lands close to villages. Most state lands are located several miles away from villages. State lands are used as a source of timber only when there is a demand for higher quality timber, such as trees suitable for house logs, which are not available closer to the community.

Personal use permits are required for cutting standing trees for firewood and house logs on state land. However, because of the remoteness of the area, a permitting program for fuelwood has not been initiated in the Northwest Area. A few houselog permits have been issued in recent years in the Northwest Area.

There are no primary designations of state land for timber production in the Northwest Area because forest resources on state land are limited. Nevertheless, personal use of timber resources--including driftwood--for house logs and firewood, is very important to residents. Fourteen of 26 area communities are located in or near forested areas.

Forested state lands will continue to be available for public use. Where timber occurs on state lands in the planning area, forestry will be a secondary use. Harvesting may take place whenever compatible with the primary uses of the area. Management of state-owned forest land in the area under the Forest Practices Act, specifically the provisions dealing with multiple use and sustained yield, should allow continuation of forest resource production to meet user demand. Although there is very little inventory data available for the area, it is apparent that sustained yield levels of harvest are not being approached.

GRAZING

Goals

Grazing Opportunities. Provide opportunities for the grazing of reindeer and other livestock on state lands.

Sustained Yield. Protect state rangelands by incorporating sustained yield concepts in grazing authorizations.

Management Guidelines for Reindeer and Other Livestock

A. Multiple Use Management of Lands with Grazing Potential. Lands with grazing potential shall be managed for multiple use, consistent with the land use allocations and management policies of this plan.

B. Public Access and Public Use of State Lands. Public access across and public use of lands under a grazing authorization may not be limited by the permittee.

C. Grazing On Important Habitat Lands. Grazing may be prohibited in certain habitats if DNR determines, in consultation with Alaska Department of Fish and Game, that impacts can not be mitigated through specific management guidelines. Examples of areas that may require consideration are areas of winter moose concentration, endangered species habitat, Dall sheep habitat, and areas of brown bear concentration.

D. Wildlife Conflicts. The state assumes no responsibility for loss of livestock to predators or wildlife conflicts.

E. Guidelines for Livestock Other Than Reindeer. The grazing of livestock other than reindeer will require a grazing operations plan and may require the development of range management plans, in accordance with guidelines established for grazing in the Copper River Basin Area Plan.

F. Other Guidelines Affecting Grazing. Several other guidelines may affect grazing. See the following sections of this chapter:

- Coordination and public notice
- Fish and wildlife habitat
- Forestry
- Heritage resources
- Lakeshore management
- Materials
- Public access
- Stream corridors and instream flow
- Subsistence activities and traditional uses
- Subsurface resources
- Trail management
- Transportation
- Wetlands management

Management Guidelines for Reindeer Grazing

A. Grazing Authorizations. A grazing authorization will be required to graze livestock on state land. Grazing authorizations may require a grazing operations plan. The permitting process will address specific concerns, such as disposal of slaughter waste. Public notice is required in accordance with *Coordination and Public Notice*, Guideline C, page 2-5, prior to issuing grazing authorizations.

The complex land ownership pattern in Northwest Alaska necessitates that reindeer herders negotiate with several land owners to receive an authorization for grazing. Cooperating land owners should develop a coordinated application process for reindeer grazing.

B. Grazing Operations Plan. The purpose of a grazing operations plan is to: 1) facilitate coordination between the herder and landowners and, 2) ensure that sustained yield principles are being applied to protect the state's rangelands.

To the extent practical, the development of a grazing operations plan for a grazing operation unit will be coordinated by the Alaska Soil and Water Conservation District through a cooperative agreement with the permit applicant and land owners and managers. Technical assistance can be provided by the USDA Soil Conservation Service. Grazing operation plans, as they pertain

to state land, are subject to approval by DNR, in consultation with affected agencies.

A grazing operations plan should include:

1. map(s) that show:
 - a. the location of the state permit area and non-state land to be used for grazing (and the ownership of this land),
 - b. the location(s) of existing or proposed improvements needed for herding operations (corrals and other temporary improvements), and
 - c. important wildlife habitat areas within the grazing area (these areas are to be identified in consultation with DF&G);
2. a description of the grazing system with a grazing schedule to be used for the entire operation unit, including state and any federal or private lands utilized, recognizing that each land manager may have different management goals;
3. initial stocking rate, determined by inter-agency standards;
4. a coordinated range utilization and range condition monitoring plan; and,
5. a list of measures to minimize conflicts with other land and water uses that DNR has determined are appropriate for the operating unit or portions thereof.

Modification of a grazing operations plan will be considered if new conditions or information indicates a significant change in the plan may be

necessary. To the extent feasible and prudent, the Alaska Soil and Water Conservation District will review the grazing operations plan, assess the need for any modifications, and recommend to DNR the actions necessary to meet the concerns. DNR shall determine if modification of a grazing operations plan is necessary, after consultation with the permittee and appropriate agencies.

Land Allocation Summary

Currently, 14 permits are issued for reindeer grazing in the NWAP area, mostly on the Seward Peninsula. With the exception of a few small areas, permits cover all of the land on the Seward Peninsula, approximately 15 million acres. Twelve of the 14 permits involve state land (approximately 5 million acres). Permits for grazing activities on state land do not transfer any interest in state land to the permittee.

State lands will continue to be available for reindeer grazing. Reindeer grazing may take place whenever compatible with the primary uses of the area. Permits may be issued until grazing operation plans are developed for long-term authorizations.

Grazing of livestock other than reindeer on state lands has not occurred in recent years, and is not expected to increase. Similar procedures to reindeer grazing are required if grazing of other livestock is requested. Additional guidelines may be required for livestock other than reindeer, such as examination for disease or parasites before approval for release.

HERITAGE RESOURCES

Goals

Cultural Resources. Preserve and protect the historic, prehistoric, and archaeological resources of Alaska in accordance with the Alaska Historic Preservation Act.

Natural History and Scientific Resources. Preserve and protect areas with important natural history, scientific, and research values.

Cooperation and Input. Solicit input and cooperate with concerned agencies, groups, and individuals when considering heritage resource surveys or development projects.

Management Guidelines

A. Heritage Resource Identification. Identify and determine the significance of all cultural resources on state land through:

1. Review of the Alaska Heritage Resource Survey (AHRS) maps and files maintained by the State Office of History and Archaeology. The AHRS is the statewide listing of all historic, prehistoric, and paleontological sites in the state, including most ANCSA 14(h)1 sites.
2. Surveys conducted by the Department of Natural Resources personnel.
3. Encouraging research about heritage resources on state lands by qualified individuals and organizations.
4. Cooperative efforts for planned surveys/inventories between state, federal, local, and Native groups listed in Appendix B.

B. Heritage Resource Protection. Protect significant heritage resources by:

1. Reviewing proposed construction projects or land uses for potential conflict with heritage resources.

2. Recognizing the importance of cultural resource sites to the region, and cooperating with concerned government agencies, statewide or local groups, and individuals listed in Appendix B to develop guidelines and recommendations on how to avoid or mitigate identified or potential conflicts.

3. Where feasible and prudent, conducting heritage resource surveys or inventories prior to the design of land offerings in the areas the state Office of History and Archaeology determines have potential to contain important heritage sites and for which existing information is inadequate to identify and protect those sites.

4. Consulting with affected communities and non-profit corporations, prior to the removal of any artifacts, and maintaining consistency with coastal management programs, in addition to requirements of AS 41.35.

C. Other Guidelines Affecting Heritage Resources. Several other guidelines may affect heritage resource management practices. See the following sections of this chapter:

- Coordination and public notice
- Fish and wildlife habitat
- Forestry
- Lakeshore management
- Public access
- Settlement
- Stream corridors and instream flow
- Subsistence activities and traditional uses
- Trail management
- Wetlands management

LAKESHORE MANAGEMENT

Goals

Public Use. Protect and enhance a variety of lakeshore public use opportunities, and protect visual quality of lakeshores.

Habitat. Protect fish and wildlife habitat along lakeshores.

Private Ownership of Land. Provide opportunities for private ownership of lakeshore property.

Water Quality. Maintain water quality.

Management Guidelines

A. Land to be Retained. Where land near a lake is conveyed to private ownership, at least 50 percent of all public land within 500 feet of the shore of lakes should be retained in public ownership. Retained lands should include at least 50 percent of the actual shoreline (ordinary high water) as a lakeshore buffer (see Guideline B below). These percentages may be increased or decreased case by case or as part of a regional strategy to provide a full spectrum of public and private opportunities for recreation, habitat, and subsistence if topography, amount of use, or other local conditions warrant. A significant portion of the lakefront land retained in public ownership should be suitable for recreational and subsistence activities. Where feasible, the publicly retained land should include the land adjacent to lake inlets and outlets. On all lakes where airplanes can land, public access sites should be retained if land is sold. (See also *Settlement Guideline C-4*, page 2-31.)

B. Management of Lakeshore Buffers. Lakeshore buffers are areas which have been kept in public ownership. Buffers generally will be managed to protect public access, minimize negative effects from adjacent land uses, and maintain the natural vegetation within the buffer. Uses may be allowed in publicly owned

lakeshore buffers if the uses are consistent with the purposes for which the buffer was established and do not block public access or adversely affect water quality. For example, if the purpose of the buffer is public recreation, habitat, or subsistence, uses such as private docks for adjacent upland owners may need to be consolidated to minimize the impact on public recreation, habitat, or subsistence values. If on the other hand, individual docks for upland owners would not adversely affect water quality, habitat, or subsistence values, then individual docks will be allowed. In the design and review of each disposal adjacent to a publicly owned lakeshore buffer, the Division of Land and Water Management will determine what activities within the buffers will not require specific authorization from DNR for upland owners.

C. Establishing Widths of Easements and Setbacks. Where lakefront property is conveyed from state ownership or made available for remote cabin permits, a minimum public access easement of 50 feet will be reserved along the shoreline, and a minimum residential building setback of 100 feet will be required unless land adjacent to the lake is stable and development or use of it does not pose a risk to water quality or other values such as wildlife, subsistence, or recreation. In some cases setbacks may need to be reduced to allow for an adequate buffer or setback on a nearby, more valuable stream or wetland. In some management units different minimum staking setbacks have already been established.

Water-dependent structures, such as docks or boathouses, are allowed within easements and setbacks if public access is not blocked or alternative public access is provided.

D. Structures in Fish Habitat. See *Fish and Wildlife Habitat Guideline C*, page 2-7.

E. Water Intake Structures. See *Fish and Wildlife Habitat Guideline D*, page 2-7.

F. Other Guidelines Affecting Lakeshore Management. Several other guidelines may affect lakeshore management. See the following sections of this chapter:

- Coordination and public notice
- Fish and wildlife habitat
- Forestry
- Grazing
- Heritage resources
- Materials
- Public access
- Public and commercial recreation
- Settlement
- Subsistence activities and traditional uses
- Subsurface resources
- Trail management
- Transportation and utilities
- Wetlands management

MATERIALS

Goals

State Revenues. Establish a stable source of state revenues and provide an economical source of materials for development of public facilities.

Economic Development. Provide materials that can be used for development to help provide stable job opportunities and allow development of other industries.

Environmental Quality and Heritage Values. When developing material resources, protect the integrity of the environment and affected heritage resources to the extent feasible and prudent.

Management Guidelines

A. Preferred Material Sites. Altering streams can cause significant negative effects on other resources and lands. Therefore, to the extent feasible and prudent, DNR will give preference to using upland material sources in any ownership when responding to a request for a material sale or identifying a source for materials on public lands. Rivers in the Northwest area are important for fisheries, public use, and transportation. Extracting materials from wetlands, lakes, and active or inactive floodplains of rivers or streams should be avoided unless no feasible public upland alternative exists. Sales or permits for sand, silt, or gravel extraction will not be permitted in fish spawning areas identified by DF&G unless extraction would enhance the site for rearing and the activity is agreed to by DF&G.

B. Material Extraction From Floodplains. If the only feasible and prudent source of gravel is a floodplain of a stream or river, or a site is desirable for fisheries production, the following guidelines will be used to minimize negative impacts of material extraction on other resources and uses.

1. To the extent feasible and prudent, sand and gravel will be extracted from the following river configurations in the order of highest to lowest preference: braided, split channel, meander-

ing, sinuous, and straight. When possible, exposed sand and gravel bars in broad, active floodplains will be considered for extraction. In general, extraction from larger rivers is preferred over smaller rivers because of the reduced potential for impacts to the river hydraulics and floodplain.

2. To the extent feasible and prudent, changes to channel hydraulics will be avoided.

3. Sand and gravel pits will be located to minimize the probability of channel diversion through the site.

4. The effects of sand and gravel removal will be minimized by maintaining buffers between active channels and the work area and by avoiding instream work, unnecessary clearing of riparian vegetation, and disturbance to natural banks.

5. To the extent feasible and prudent, site configurations will avoid the use of long straight lines and will be shaped to blend with physical features and surroundings to provide for diverse riparian and aquatic habitats.

6. If the work area may be inundated by high water during the period of operation, temporary dikes will be constructed around the site to segregate the work area from active channels and avoid the entrapment of fish.

7. Removal of sand and gravel from floodplains of fishbearing streams will not adversely impact spawning or overwintering habitat.

8. When gravel washing operations occur in the floodplain, settling ponds will be used to remove suspended materials from the wash water; settling ponds will be adequately diked or set-back from active channels to avoid breaching by a 10-year frequency flood. Wash water will be recycled or other appropriate mining technologies will be utilized so that the effluent discharge complies with state and federal water quality regulations.

9. Whenever possible, avoid vegetated habitats.

10. When small quantities of gravel are required (up to 50,000 cubic yards), sites should be

selected that have only unvegetated gravel deposits.

11. When large quantities of gravel are required (generally over 50,000 cubic yards), large rivers that contain sufficient gravel in unvegetated areas or terrace locations on the inactive side of the floodplain should be selected and mined by pit excavation.

12. If mining in vegetated areas, where feasible and prudent, vegetation and debris will be saved for site rehabilitation to facilitate vegetative recovery. This material should be piled or broadcast so that it will not be washed downstream.

13. When uplands adjacent to extraction sites located on river bars are not state-owned, extraction or use of the upland site above the ordinary high water mark will only be conducted with the permission of the upland owner.

14. To the extent feasible and prudent, DNR will avoid authorizing gravel extraction at sites that are in direct conflict with traditional activities such as, but not limited to, fish camps, fish wheels, net drying sites, and set-net locations. This will be accomplished by directing applicants to use alternate sites or stipulating that extraction occur at times that will not overlap with the conflicting use.

15. Stationary fuel storage facilities and unattended storage of fuel, lubricants, or other hazardous substances shall not occur within the active floodplain.

C. Maintaining Other Uses and Resources When Siting and Operating Material Sites. Before materials are extracted, the manager will ensure that the requirements of the permit or lease adequately protect other important resources and uses such as existing water rights, water resource quantity and quality, navigation, fish and wildlife habitat and harvest, commercial

forest resources, recreation resources and opportunities, historic and archaeological resources, adjacent land uses, and access to public or private lands. The disposal of materials should be consistent with the applicable management intent statement and management guidelines of the plan.

The manager should also determine if other existing material sites can be vacated and rehabilitated as a result of opening a new material site.

D. Land Sales in Areas of High Material Potential. See *Settlement* Guideline C-6, page 2-31.

E. Screening and Rehabilitation. Where topography and vegetation allow, material sites should be screened from roads, residential areas, recreational areas and other areas of significant human use. Sufficient land should be allocated to the material site to allow for such screening. Where appropriate, rehabilitation of material sites will be required. For additional guidelines affecting material extraction see *Subsurface Resources* Guidelines B and C, page 2-45.

F. Mouths of Anadromous Streams and Enclosed Estuaries. See *Fish and Wildlife Habitat* Guideline J, Page 2-8.

G. Other Guidelines Affecting Materials. A number of other guidelines may affect materials management. See the following sections of this chapter:

- Coordination and public notice
- Fish and wildlife habitat
- Heritage resources
- Public access
- Public and commercial recreation
- Subsistence activities and traditional uses
- Subsurface resources
- Transportation and utilities

Land Allocation Summary

Due to ongoing development and maintenance of roads, airstrips, seawalls, harbors, boat landings and general construction in the plan area, there is a continuing demand for materials (sand, gravel, riprap, building stone). Close to communities, where demand for materials is greatest, most upland sources are owned by Native corporations or other private land owners. State-owned material sources are often along rivers and in the floodplain. Upland sand and gravel extraction sites are preferred over sites located along streams or in wetlands. A study has been done by Maniilaq Association for the Department of Transportation and Public Facilities which inventories material sources near communities in the NANA region.

State land will continue to be available for material extraction subject to guidelines of the plan.

PUBLIC ACCESS

Goal

Public Access. Maintain, enhance, or provide adequate access to public land and resources.

Management Guidelines

A. Retain Access. Access sites and corridors should be retained in public ownership and improved and maintained when feasible. Where practical and within limits of available funding, full public rights of access should be provided when roads are constructed by state and local governments. Existing public access to mineralized areas, recreation, fish, wildlife, forest, and other public resources should be maintained or improved when an access route is constructed for resource development purposes. The potential for causing increased demand for limited resources and for causing increased user conflicts, including subsistence use, should be considered when determining if existing access should be improved.

B. Reserve Rights of Access. Rights of access should be reserved by the state when state land is sold or leased.

C. Acquire Access. Perpetual exclusive easements should be acquired and recorded when the state acquires access rights across property in other ownerships. Public appropriations for the purchase of access sites, easements or reservations providing access to public use areas and to proposed settlement property may be requested by DNR.

D. Establish and Maintain Easements. Generally, section line easements should not be vacated unless there is some overriding reason to vacate them, and alternative, physically usable access can be established.

E. Assert Rights-of-Way. No potential RS2477 rights-of-way have been identified for validation by DNR at this time to implement this plan.

F. Management of 17(b) Easements. Generally, DNR will not accept management of 17(b) easements unless the trail or easement is already partly under state management, or state management of the easement will best protect public access to state lands.

G. Coordination With the Department of Transportation and Public Facilities (DOT&PF). Specific access requirements, such as widths of rights-of-way or locations of roads, should be coordinated with DOT&PF.

H. Managing Access. Access to public lands may be managed at certain times and in certain places to protect public safety, to allow special uses, and to prevent harm to wildlife resources, the environment, or other natural resources. Examples of situations when limitations of public access may be justified include during fire suppression, during timber harvest, during development of oil and gas facilities, and during periods of high soil moisture when vehicle traffic may cause extensive damage to roads and trails.

I. Provide Access from Staging Areas. Access corridors should be established and maintained from lakes, stream sections, seacoast areas, and land areas which have the potential to serve, year-round or seasonally, as important points of aircraft or watercraft access from which overland access can be staged to resource-use and settlement areas.

J. Community Notice. See *Coordination and Public Notice*, Guideline C, page 2-5 for public notice requirements when reviewing requests for rights-of-way authorizations.

K. Provision of Access Within Land Sale Areas. See *Settlement* Guideline D-3, page 2-31.

L. Other Guidelines Affecting Public Access.

Several other guidelines may affect public access.

See the following sections of this chapter:

- Coordination and public notice
- Fish and wildlife habitat
- Forestry
- Grazing
- Heritage resources
- Lakeshore management
- Materials
- Public and commercial recreation
- Settlement
- Stream corridors and instream flow
- Subsistence activities and traditional uses
- Subsurface resources
- Trail management
- Transportation and utilities
- Wetlands management

PUBLIC & COMMERCIAL RECREATION

Goals

Recreation Opportunities. Meet recreational needs by:

1. Providing recreation opportunities on land and water areas that serve multiple purposes such as habitat protection, subsistence activities, and mineral resource extraction.
2. Assisting communities through cooperative planning, conveyance of state lands, and grants-in-aid for parks and trails within population centers.
3. Encouraging commercial development of recreational facilities and services through leases, loans, and technical assistance where public recreation needs can most effectively be provided by private enterprise, while avoiding or minimizing conflicts with traditional uses and protecting local economies.

Recreation Resource Protection. Protect natural and heritage resources by:

1. Protecting recreation resources including public access, heritage resources, and natural features of regional or statewide significance.
2. Assisting other land management agencies to perpetuate natural and historic features on non-state lands, in community park systems, and on private property by providing technical assistance and grants-in-aid.
3. Rehabilitating and maintaining recreation facilities that enable greater appreciation of Alaska's scenic and historic resources.
4. Maintaining viable fish and wildlife populations.

Economic Development. Increase economic benefits of tourism by:

1. Providing for increased employment in tourism and recreation.
2. Providing infrastructure support for facilities and services related to tourism.
3. Providing technical assistance and grants-in-aid to promote tourism and provide education programs on tourism.

4. Maintaining a balance between the economic benefits of tourism and existing community lifestyles.

Management Guidelines

A. Shelter Cabins. A system of shelter cabins should be established for public, non-profit use. Cooperation will be sought with municipal or federal governments, ANCSA corporations, or nonprofit organizations for construction and management of shelter cabins, or use of cabins received through enforcement actions.

B. Permanent Commercial Recreation Facilities on State Land. Lodges or other private facilities designed to be run as private, profit-making recreation facilities may be leased if the facility fulfills the following conditions and a finding in accordance with AS 38.05.035.

1. Commercial recreation development adds to or enhances public recreation opportunities.
2. The use generated by private, recreation development will not result in significant adverse effects on important fish and wildlife populations. In making this determination, DNR shall consult with the Department of Fish and Game.
3. The commercial facility and the use it generates will avoid significant negative impacts on the amount and quality of existing uses, including fish and wildlife harvest. It is recognized that a quantitative determination of the effects of the proposed facility will rarely, if ever, be possible, but an assessment of impacts should use information as available from DNR, DF&G, appropriate coastal districts and community organizations listed in Appendix B, or other available sources. The assessment should include the following:
 - a. The number of commercial recreation leases and permits that already exist on state and other land in that unit and the amount of use they generate.

b. Management intent and guidelines of this or subsequent plans for the unit.

c. Management objectives for nearby non-state lands (to the extent this information is readily available).

This information will be gathered as part of the normal leasing process and the notice requirements described in *Coordination and Public Notice*, Guideline C, page 2-5.

4. The facility can be sited, designed, constructed, and operated in a manner that minimizes conflict with natural values and traditional uses of the area, including reindeer fawning areas. See *Subsistence Activities and Traditional Uses* Guideline A, page 2-43.

5. Additions to existing facilities, rebuilt facilities, or new facilities will be sited and designed in accordance with stream corridor, access, wetlands, and other guidelines of this plan. Final approval of a permit or lease for the facility will be given only after consultation with the Department of Fish and Game and the Division of Parks and Outdoor Recreation.

C. Temporary Commercial Recreation Facilities on State Land. Tent camps and other temporary private recreation facilities designed to be used as private profit-making facilities may be permitted if the facility fulfills the following conditions and is determined appropriate after interagency review.

1. Private recreation development adds to or enhances public recreation opportunities.

2. The use generated by private, recreation development will not result in significant adverse effects on important fish and wildlife populations. In making this determination, DNR shall consult with the Department of Fish and Game.

3. The commercial facility and the use it generates will avoid significant negative impacts on the amount and quality of existing uses, including fish and wildlife harvest. It is recognized that a quantitative determination of the effects of the proposed facility will rarely, if ever, be possible, but an assessment of impacts should use information as available from DNR, DF&G, appropriate coastal districts and community organizations listed in Appendix B, or

other available sources. The assessment should include the following:

a. The number of commercial recreation leases and permits that already exist on state and other land in that unit and the amount of use they generate.

b. Management intent and guidelines of this or subsequent plans for the unit.

c. Management objectives for nearby non-state lands (to the extent this information is readily available).

This information will be gathered as part of the normal permitting process and the notice requirements described in *Coordination and Public Notice* Guideline C, page 2-5.

D. Commercial Recreation. Most state lands will be available for permits and leases for commercial recreation. Commercial recreation leasing requires public notice under AS 38.05.945 and 38.05.946 at least 30 days before the action. In addition to the public notice requirements of the statutes and the *Coordination and Public Notice* Guideline C, page 2-5, a public meeting will be held for commercial recreation lease applications upon the request of the appropriate coastal district, local government, ANCSA corporation, 25 members of the public, or community organization listed in Appendix B. Commercial recreation leases will not be allowed in certain important habitat areas: marine mammal haulouts, seabird colonies, sheefish spawning areas, and within one-quarter mile of mouths of anadromous streams or enclosed estuaries. These areas are shown on the management unit maps in Chapter 3.

Additionally, alternative sites must first be considered in applicable special use areas of the coastal plans, consistent with the appropriate coastal plan policies. Commercial recreation leases may be allowed in these special use areas if no feasible and prudent alternative site exists, and the applicant provides information demonstrating such to DNR.

E. Optimum Use of Sites. Achieve optimum use of recreation sites consistent with maintaining high quality recreation experiences, wildlife harvest, environmental quality, and safety.

F. Other Guidelines Affecting Recreation Resources. Several other guidelines may affect recreation management practices. See the following sections of this chapter:

- Coordination and public notice
- Fish and wildlife habitat
- Forestry
- Heritage resources
- Public access
- Shoreline development
- Stream corridors and instream flow
- Subsistence activities and traditional uses
- Trail management
- Lakeshore management
- Wetlands management

Land Allocation Summary

The area's land and natural resource base provides the setting for a wide variety of dispersed outdoor recreation opportunities. Present levels of nonconsumptive outdoor recreation use in the area, such as rafting, boating, camping, and hiking, are low due to area population, remoteness, and limited access. Most nonconsumptive recreation on state lands is by local residents near population centers. Recreational activity by visitors takes place main-

ly in the Brooks Range and on certain rivers such as the Kobuk and the Noatak.

State lands will continue to be available for public recreation except those offered for land disposal. Most state lands will be available for permits and leases for commercial recreation facilities. However, commercial recreation leases will not be allowed in high value habitat areas: seabird colonies, marine mammal haulout areas, sheefish spawning areas, and mouths of anadromous streams and enclosed estuaries. The high value habitat areas are shown on each management unit map.

The plan does not propose the allocation of any state land for parks, recreation areas, or recreation sites specifically reserved for outdoor recreation. Recreational and scenic qualities of state lands will be protected through plan guidelines dealing directly with these values and other resources such as fish and wildlife habitat.

In the planning area, recreation is a co-primary land-use designation for state uplands along the Kobuk River (Unit 3d), and for the beds of the Kobuk and Noatak rivers in Unit 7. Recreation designations occur for secondary use in 23 sub-units, wherever recreation activities currently exist and are documented (see the Resource Information Summary Charts in Chapter 3).

REMOTE CABINS & TRAPPING CABINS

Goals

Remote Cabins. Provide opportunities for isolated cabin development in remote parts of the Northwest Planning Area where survey and conveyance are impractical, where disposal of land would cause potential conflicts with other resources and uses, and where a long-range interest in public ownership and use exist.

Trapping Cabins. Support the trapping economy of the region by providing sites for trapping cabins while avoiding or minimizing interference with subsistence activities and traditional uses.

Community and Social Impacts. Consider the needs and demands of all state residents and minimize the impacts on communities and resources when authorizing remote cabins or trapping cabins.

Management Guidelines For Remote Cabins

A. Minimize Conflicts. To avoid conflicts with public access, important fish and wildlife habitat, public use, and trapping, permittees will not be allowed to build remote cabins in the following areas:

1. Within 50 feet of the ordinary high water mark of a lake, stream, river, wetland, or existing trail unless a greater distance is required in a specific management unit.
2. Where public access for hunting, trapping, fishing, recreation, or mining would be hindered.
3. Within one-quarter mile of existing airstrips used by the public.
4. Within one mile of a guide site authorized under a state permit or lease.
5. Within one mile of established, traditionally used campsites.

Persons receiving a remote cabin permit are responsible for installing a wastewater system

that complies with the Department of Environmental Conservation's wastewater regulations.

B. Fire Protection. DNR will not alter fire management plans because of the presence of remote cabins. Cabin permit holders will be advised before permit issuance and in the permit that DNR does not assume liability due to loss or damage to the cabin from wildfires and will not provide fire protection if the fire management plan does not call for such protection in the area.

DLWM will notify the Division of Forestry Fire Management Planning Team of the location of all authorized remote cabins.

C. Spacing Cabins. Remote cabins will be spaced at least one-half mile from another remote cabin or trapping cabin unless a different spacing requirement is established for a particular management unit in Chapter 3. The distance between a remote cabin, a traditional subsistence campsite, and a trapping cabin may also be reduced if one person is the permittee for both structures or the adjacent permittee expresses a non-objection.

D. Legal Access. To avoid trespass problems DNR will provide remote cabin permit holders with information on legal access routes to the remote cabin area.

E. Buildings, Density, and Specific Guidelines. Limitations on the number or size of buildings, location of cabin sites, allowed or prohibited forms of access, and any other considerations appropriate to the area and consistent with remote cabin regulations may be established before remote cabin permits are offered.

The densities established for remote cabin permits in each unit are for new cabins and are not affected by the existence of unauthorized cabins on state lands, or their eventual disposition.

In order to reduce cost to the state and increase satisfaction for the permittee, remote cabin permittees should be allowed to choose their own cabin sites within the constraints of the guidelines of this plan and the remote cabin regulations,

rather than having the department establish the sites.

F. Type of Interest in Land. Remote cabin permits are not intended to be converted to fee simple disposals of land that otherwise would be retained in state ownership. Guidelines for remote cabins in each area are designed to avoid creating future pressures for actual disposal (for example, by setting appropriate number and density limitations).

G. Rights-of-Way. New rights-of-way to remote cabin sites will not be granted unless doing so protects other important public values.

H. Mineral Entry. Unless closed for reasons other than the presence of permitted remote cabins, remote cabin permit areas will remain open to mineral entry.

I. Avoid Conflicts with Traditional Uses of Resources. See *Subsistence Activities and Traditional Uses* Guideline A, 2-43

J. Use of Remote Cabins for Trapping.

Under the current remote cabin regulations, commercial trapping and other commercial uses are not allowed from a remote cabin. Commercial trapping from remote cabins would create significant conflicts with existing uses in the planning area. Remote cabin permits given in the Northwest Area will contain provisions prohibiting commercial trapping. Therefore, if the remote cabin regulations are changed to allow commercial uses, commercial trapping will still be a prohibited use from the remote cabins in the Northwest Area.

K. Other Guidelines Affecting Remote Cabins. Several other guidelines may affect remote cabin management practices. See the following sections of this chapter:

- Fish and wildlife habitat
- Lakeshore management
- Public access
- Stream corridors and instream flow
- Subsistence activities and traditional uses

Management Guidelines for Trapping Cabins

A. Permits and Community Practices. Traplines within the planning area can be hundreds of miles long. Shelters along these lines are typically temporary structures such as wall tents. Shelters created for short duration do not require a permit. Frame structures or shelters erected for long periods of time require a permit.

The construction of permanent shelters for the purpose of trapping or hunting is not common in Northwest Alaska. Tents continue to be the primary shelters utilized during trips away from the central residence or fish camp. The ability to move freely without regard to individual territorial restrictions is an important element in the local system of land use. Sociologically, the catch from trapping areas was generally shared by a large family or within the local family kinship system. Biologically, the furbearer carrying capacity of Northwest Alaska is much lower than in other, more forested areas of the state. Trapping use has traditionally moved with the resource; certain areas become relaxed in usage or allowed to rest without harvest pressure for some periods to minimize impacts or revitalize the resource. Issuance of a trapping cabin permit to an individual would be contrary to the existing open and non-territorial system of trapping practiced in Northwest Alaska, and could seriously disrupt the general subsistence use patterns of the local residents. For these reasons, trapping cabin construction permits should not be issued if the cabin will conflict with existing trapping and subsistence activities.

B. Distance Between Trapping Cabins. New trapping cabin permits will not be issued within five miles of a known actively-used trapping cabin on either state or non-state land unless a physical barrier such as a mountain range separates the two cabins, or both cabins are permitted to one person, or the permittee of the adjacent cabin expresses a non-objection to a lesser distance.

C. Minimize Conflicts. To avoid conflicts with public access, important fish and wildlife habitat, and public use, permittees will not be allowed to build trapping cabins within 50 feet of the ordinary high water mark of a lake, stream, river,

wetland, or existing trail. A greater distance may be required in a specific management unit.

D. Avoid Conflicts With Traditional Uses of Resources. DNR will make a reasonable effort to provide notice so that users of the area may learn of the proposed action and make known the type and location of his or her use. See *Subsistence Activities and Traditional Uses*, Guideline A, page 2-43.

E. Other Guidelines Affecting Trapping Cabins. Several other guidelines may affect trapping cabin management practices. See the following sections of this chapter:

- Coordination and public notice
- Fish and wildlife habitat
- Lakeshore management
- Stream corridors and instream flow
- Subsistence activities and traditional uses

Land Allocation Summary

Two areas totalling 131,200 acres will be open to remote cabin permits when the program is approved for implementation. Actual cabin sites will be widely scattered in these areas with only 14 permits being made available.

ACREAGE & NUMBER OF REMOTE CABIN PERMITS BY AREA

Permit area	Subunit(s)	Acreage	Permits
Sinuk River	5b, 5g	23,040	4
Upper Koyuk River	6b, 6c	108,160	10
Total		131,200	14

Trapping cabins are allowed on state lands throughout the planning area, subject to the guidelines of this plan. Trapping cabin construction permits have been issued for two sites on the Mauneluk River, and are applied for on two other sites in Unit 3 (see Appendix E).

SETTLEMENT

Goals

Private Land Use. Make available to present and future Alaskans suitable public land for private settlement. DNR can identify and offer lands that are suitable for year-round residence, seasonal residence, or self-sufficient remote residence. Once the land is sold the owner must decide how to use the land in accordance with applicable laws and regulations. DNR can not guarantee that, for instance, land sold to satisfy the demand for seasonal residences will not be used for permanent residences. Nor can DNR assure that future land owners will not demand public services and improvements such as schools. Within the planning area DNR considered the demand for each of the five categories of settlement listed below. However, there is little state land near existing communities or on the major rivers. Given the nature of demand for settlement lands in the area, the department's emphasis in the planning area has to be on meeting demand for recreational use and seasonal residences.

1. Recreational use or seasonal residences. This category is the most common use of land disposed of by the state. DNR will, where feasible, avoid poor quality sites, such as north facing slopes, and offer quality sites with characteristics such as proximity to water, views, good hunting, or interesting topography. Because there is a limited supply of state land with characteristics that make it highly desirable, the state will have to offer some lands that do not have exceptional amenity values to meet the demand for recreational and seasonal use.

The state will also offer opportunities for recreation and seasonal use through the state's remote cabin program (see the *Remote Cabin* section, page 2-25 in this chapter).

2. Year-round residences or community expansion. Although there is little state land near existing communities, where it can, DNR will offer accessible land that is suitable to meet the needs of growing communities. This category serves people whose principal place of residence--and

usually work--is or will be in the area of the disposal.

3. Year-round, relatively self-sufficient remote residences. DNR will provide opportunities for a few people who wish to pursue a remote, more or less self-sufficient lifestyle. Generally, the state will not offer tracts large enough for families to subsist on, but rather will offer smaller parcels adjacent to public lands. Under current programs, homesteads are limited to 40 acres or less. Entrants can use adjacent public land to gather firewood and house logs and to hunt and fish.

This category, although important, will not be a high priority in the disposal program because it is expensive (due to survey costs) and requires a commitment of large amounts of public land to satisfy relatively few people; and it is less in demand than the preceding two categories.

4. Settlement associated with natural resource development projects. The state will set a high priority on making land available for the development of new towns or the expansion of existing communities adjacent to major resource development projects. In some cases, the state must decide if leasing lands for a campsite or temporary settlement is preferable to selling land for a townsite.

5. Industrial or commercial development. To stimulate or facilitate economic development, DNR will sell, lease, or protect for future use suitable land for settlement associated with private, commercial, industrial use. Requirements for these uses are highly site-specific, and disposal decisions will be made case by case as demands arise.

Resource and Economic Impacts. Contribute positively to other uses of natural resources and minimize the undesired impacts of land offerings on opportunities for resource use.

Land Acquisition. Provide individuals a range of options for acquiring title to state land. Under the current homestead and homesite programs, state land may be acquired by various combina-

tions of residing on the property, constructing a dwelling on the property, and purchasing the property. State lands offered for private ownership under the general land disposal program will be sold for current, fair market value, subject but not limited to the exceptions noted in AS 38.05.055 and 38.05.057.

Fiscal Impacts. Minimize future fiscal costs to local or state government for services, wildfire management, and infrastructure requirements that result from settlement of state lands.

Community and Social Impacts. Minimize undesired changes in the character of life among nearby communities or residents caused by land disposal projects, while considering the needs and demands of all state residents.

Coordination With Local Governments and Landowners. Coordinate state land offering programs with similar programs of local governments and major landowners to best achieve common objectives. Consider availability of land in private ownership when determining the amount, type, and location of state land offerings.

Management Guidelines

A. Planning and Coordination

1. Long-term Program. Under this plan up to 1,250 acres may be offered for settlement. With certain exceptions that are noted in Chapter 3, the acreage offered in any given area designated for settlement may be adjusted up or down based on the amount of land determined suitable for offering during the land disposal and planning process.

The disposal program will be designed to make land available for at least 20 years to ensure that Alaskans have the opportunity to acquire public land in the future. The pacing of land disposals will be controlled through the disposal schedule described in Guideline A-6 below.

2. Competition. Although the state will coordinate its offerings with those of other landowners, it may compete with the private sector or local governments if necessary to satisfy demand, provide market choice, or moderate prices.

3. Local Plans. DNR will comply with provisions of local comprehensive plans regarding the pace, location, and density of land development except to the extent that local requirements are inconsistent with a major overriding state interest.

4. Design Review Boards. In addition to holding public meetings, a local design review board will be established when, in the opinion of the Director of the Division of Land and Water Management, it would be a constructive way to involve persons affected by a disposal project. A design review board will consist of three to five members comprised of citizens and local government officials appointed by an appropriate local government, such as a coastal district or city or borough government. Where local government does not exist or is unwilling to appoint such a board, DNR will make the appointments if sufficient interest exists.

The design review board is advisory and will participate in and review all stages of design, including location, design of parcel size, transportation routes, and open space. The board will make recommendations to the Director of the Division of Land and Water Management at appropriate times during the design process.

5. Coordination with Local Governments. Where DNR and a municipality both have land offering programs, these programs should be coordinated to best achieve common objectives. To this end, DNR would develop a joint disposal plan for state and municipal lands with any municipality that is interested. This plan would consider the municipality's fiscal planning for road extension priorities and its plans for levels of services in different areas. If a municipality has a comprehensive land use plan, that plan will provide direction for disposal priorities. The disposal plan should demonstrate what community objectives would be met and how the requested capital improvement funds would support municipality-wide priorities for roads and service extensions to benefit current and future residents. The disposal plan should demonstrate how increased access and development will promote use of other resources such as agriculture, mining, forestry and recreation, and thus provide statewide as well as regional benefits.

6. Pacing. Due to concerns about impacts on community lifestyles or resources, the following land offerings on the Seward Peninsula should be phased over a number of years:

Disposal	Offer After	Acres	Parcels
Christian Creek	1990	650	All available parcels
Golden Gate I	1995	80	1/2 available parcels
Pilgrim	2000	100	All available parcels
Golden Gate II	2005	70	All remaining parcels
TOTAL		900	

The two land sale proposals within the Northwest Arctic Borough (Kolliksak Lake, 100 to 200 acres, and Mauneluk River, 75 to 100 acres) will not be offered before 1994 or until the borough's comprehensive plan is adopted, whichever comes first.

B. Types of Offerings

The types of offerings are established by the legislature and are subject to change. The following guidelines relate to several types of offerings available to the department at this time.

- 1. Predesignated Parcels.** In areas where severe land use conflicts and inefficient use of resources are expected to result from owner staking by the entrant, DNR may offer homestead parcels with predesignated boundaries.
- 2. Isolated Parcels of State Land.** The state has acquired--and will continue to acquire--isolated parcels of land through foreclosure, escheat, and other methods. The following guidelines apply to management and possible disposal of these parcels.
 - **In or Near Existing Communities.** If the parcel is in or immediately adjacent to an existing community or past state land offering, the parcel can be offered for settlement unless it is appropriate as a site(s) for schools,

gravel pits, roads, parks, sewer treatment plants, or other public facilities.

- **Parcels Near Other State Land.** If the parcel adjoins or is surrounded by other state land, it should be managed according to the management intent and guidelines applicable to the adjacent state lands.
- **Parcels Not Near Other State Land.** Parcels, such as mineral patents or homesteads surrounded by federal lands, should be considered for sale or exchange to the adjacent land owner.

3. Leases for Private Recreation Cabins. Leases for private (non-commercial) recreational cabins are prohibited.

C. Protection, Management, and Enhancement of Other Resources

1. Protection of Life and Property. The state will, to the extent feasible and prudent, discourage development in areas of flooding, unstable ground, significant avalanche risk, and other hazards. The department will achieve this objective by retaining public land, requiring building setbacks, or public education.

DNR will discourage development of non-water-dependent structures in the 100-year floodway by requiring necessary residential building setbacks and by providing available information about flood zones in land disposal brochures when a disposal is in a potential flood hazard area.

In drainages where the 100-year floodway has not been surveyed, the best available information will be used to determine the flood hazard zone that should remain in public ownership.

2. Protection and Management of Valuable Environmental Processes. The state will provide a publicly owned open-space system to preserve important fish and wildlife habitats and natural areas such as shorelands, freshwater wetlands, riparian lands, watersheds, and surface and ground water recharge areas. (See policies on these subjects for details, especially *Fish and Wildlife Habitat* Guideline H, page 2-8.)

Wetlands with important hydrologic, habitat, or recreational values and adjacent buffer strips will be retained for open space. Systems of publicly owned land will be designed to provide

the necessary linkage and continuity to protect or increase values for human uses and wildlife movements. In some places, large areas may be retained to provide adequate terrestrial habitat.

3. Protection and Enhancement of Scenic Features. The state generally will retain in public ownership unique natural features such as cliffs, bluffs and waterfalls, and foreground open space for panoramic vistas. Public access to such amenities will also be preserved.

Unusual land forms or scenic features will be retained in state ownership for enjoyment and use by the public. Such lands include islands in rivers unless land disposals can be designed to prevent negative effects on the scenic and recreational values of the area.

4. Protection and Enhancement of Recreational, Educational, and Cultural Opportunities. Project the need for, and retain appropriate areas for outdoor recreation, trails, campsites, boat launches, historic sites, and areas for scientific study. Areas for intensive and dispersed use will be preserved.

5. Protection of Subsurface Resources. Settlement areas designated by this plan generally avoid areas with high mineral potential, mining locations in good standing, existing coal leases, or moderate to high coal potential as defined in 11 AAC 85.010. In the Nome area, a few mineralized areas have been designated for dispersed settlement.

6. Protection of Material Sources. Generally if a settlement area contains sand and gravel deposits, rock sources, or other similar, high value material sources, a pit area will be identified before land offerings, and retained in public ownership for future use.

D. Design

1. Provision of Public Land for Communities. Project the need for and retain appropriate greenbelts, public-use corridors, personal-use wood lots, buffer areas, commons, building setbacks, sites for schools, gravel pits, roads, parks, and other public facilities such as sewer treatment plants and health clinics, as well as other open spaces to help create a desirable land use pattern in developing areas.

2. Cost of Public Services. In accordance with AS 38.04.010, DNR will attempt to guide year-round settlement to areas where services exist or can be provided with reasonable efficiency. State land that is located beyond the range of existing schools and other necessary public services or that is located where development of sources of employment is improbable will be sited and designed to encourage seasonal use with sufficient separation between residences so that public services will not be necessary or expected. Wildfire management costs that result from settlement will be considered and minimized to the extent feasible.

3. Provision of Access. The state will ensure that legal, practical public access (landing areas, rivers, trails, or other options most appropriate to the particular situation) is identified and reserved within land offerings. Traditional and customary access to subsistence use areas and existing trails shall also be identified and reserved within the land offering unless reasonable alternative access is provided for subsistence users (see *Subsistence Activities and Traditional Uses* Guideline B, page 2-43).

Within land offering areas made available through random staking or predesignated sites, section line or other easements should not be relied on for access without field inspection of the practicality of the route. Identified access will be described in the land offering brochure. Where needed to reduce the likelihood of conflicts with existing private owners, DNR may brush or flag public access routes to land offering projects.

When they exist and where DNR proposes a subdivision, DNR will comply with the applicable provisions of local government subdivision ordinances, including those concerning capital improvements. Where no subdivision ordinance is in effect, DNR will ensure actual physical access is available or can be developed (road, air, or water) to each new state subdivision project. The department will evaluate the need to construct new access to a subdivision case by case.

4. Personal Use of Nearby Resources. One of the considerations in deciding the location, size, and design of land disposal projects will be the nearby supply of resources, such as firewood and house logs, and the expected demand from

people who will own the parcels. Where it is anticipated that land recipients will want to use timber resources, nearby wood lots may be retained instead of selling individual parcels large enough to meet the personal use demands of the owner. This would provide some nearby public land on which firewood and house logs can be gathered while keeping open options for other uses of those lands when access develops or new demands are identified.

5. Subdivision Design. If subdivisions are offered, they will be designed to preserve and enhance the quality of the natural setting and the recreational opportunities that make an area attractive to potential buyers.

Procedures and standards for subdivision design will be as set forth in 'Design of Residential and Recreational Subdivisions,' in the Division of Land and Water Management's Policy and Procedures Manual. The subdivision design will be reviewed and approved by DEC in accordance with 18 AAC 72.065.

6. Boundaries of Settlement Designations. Boundaries of land use designations shown on the maps in Chapter 3 may be modified through on-the-ground implementation activities--for example, site planning for disposals--if the modifications adhere to the management intent for the subunits affected.

7. Easements. Easements will be used as one means to acquire rights through privately owned lands needed for public use.

Easements generally will not be used to retain a public interest in lands within a subdivision. Instead, DNR will generally retain such lands in public ownership. Exceptions to this policy may be made where the interest protected is very limited such as for local pedestrian access

that is not part of an integrated neighborhood or community trail system. This policy will minimize confusion between public use and private ownership rights.

8. Staking Outside Designated Project Areas. Entrants are responsible for establishing the location of their parcels accurately. Title will not be granted to parcels located outside the boundaries of project areas. Entrants who incorrectly locate parcels outside designated areas may be given a second opportunity to stake within the proper area.

9. Setbacks Along Streams. See *Stream Corridors*, Guideline D-2, page 2-40.

10. Setbacks Along Lakeshore. See *Lakeshore Management*, Guideline C, page 2-15.

11. Community Notice. See *Coordination and Public Notice*, Guideline C, page 2-5.

E. Other Guidelines Affecting Settlement. Several other guidelines may affect settlement. See the following sections of this chapter:

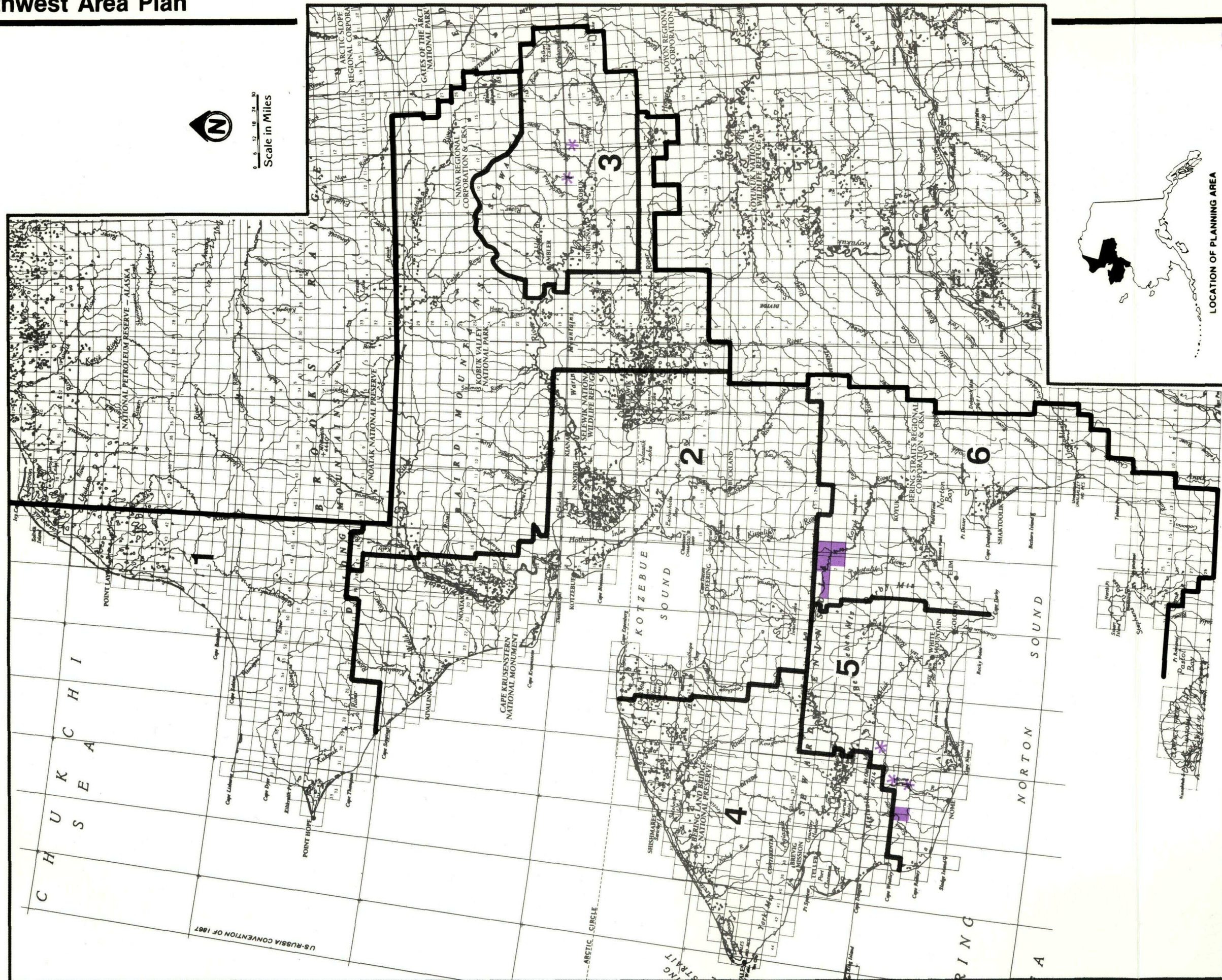
- Coordination and public notice
- Heritage resources
- Fish and wildlife habitat
- Forestry
- Grazing
- Heritage resources
- Lakeshore management
- Materials
- Public access
- Public and commercial recreation
- Stream corridors and instream flow
- Subsistence activities and traditional uses
- Subsurface resources
- Trail management
- Transportation and utilities
- Wetlands management

Land Allocation Summary

A high settlement-suitability potential was assigned to 2,691 acres of the more than 10.5 million acres of state-owned or -selected land in the planning area. Most of this land (1,894 acres) is on the Lisburne Peninsula. One hundred and ninety-nine acres of the Kobuk River and 598 of the Seward Peninsula subregions also rated high for settlement potential. Overall, in addition to the high potential land, 221,602 acres were rated moderate potential, 2,334,337 acres low potential, 7,744,915 acres unsuitable for settlement and 216,414 were not even considered for settlement because they were found to be incapable of supporting this use.

Five areas are designated to be offered for private ownership during the next 20 years. Two of these designated settlement areas are in the Kobuk Management Unit and four in the Southwest Seward Peninsula Management Unit. The 100 to 200-acre Kollioksak Lake settlement area and 75 to 150-acre Mauneluk River area in Unit 3 (Kobuk) in combination with the 100-acre Pilgrim, 150-acre Golden Gate and 650-acre Christian Creek settlement areas of Unit 5 (Southwest Seward Peninsula) total 1,075 to 1,250 acres. This represents one-hundredth of one percent--0.01 percent (approximate)--of the state-owned or state-selected uplands in the planning area.

SETTLEMENT AND REMOTE CABIN AREAS



SHORELINE DEVELOPMENT

Goals

Provide for Water Dependent and Water Related Uses. Provide for needed water dependent and water related uses on or near tidelands (see definition of "Tidelands" in Appendix A).

Coordination with Non-State Landowners. Coordinate the use of tidelands with that of private and other public land owners to provide for the optimal use, development, and protection of the resources, and to prevent encroachment on adjacent private lands.

Management Guidelines

A. Solid Breakwater, Jetty, or Causeway Design. Solid breakwaters, jetties, or causeways will, to the extent feasible and prudent, be designed to minimize impacts on fish migration and other important life stages and activities of the fish, including spawning and rearing. The design should optimize flushing to avoid concentration of pollutants.

B. Pilings Preferable to Fill. Pilings will, to the extent feasible and prudent, be used instead of fill for all shoreline development (shoreline development is defined in Appendix A). Pilings will, to the extent feasible and prudent, be:

- dug or driven and not jetted
- treated and adequately cured before use
- spaced to allow for free flow of tidal currents, longshore currents, and littoral drift

C. Siting Breakwaters, Jetties, Causeways, Harbors and Marinas. Breakwaters, jetties, causeways, harbors, and marinas should be sited and designed to minimize alteration of natural circulation and mixing patterns of water, longshore sediment and nutrient transport, and fish and wildlife migratory movements.

Harbors and launch ramps adjacent to public uplands should be sited where upland demands, such as parking, support facilities, and increased traffic flow can be accommodated.

D. Use of Bulkheads. Bulkheads should be permitted only for the purpose of erosion control or to reduce the size of fills required for water-dependent uses.

E. Bulkhead Design. When a bulkhead is necessary, it should be designed to:

- facilitate flushing
- minimize toe scour
- allow for outward ground water flow or runoff
- prevent fines from washing away, if fines are included in fill material

F. Permanent Fuel Storage. Permanent fuel storage facilities should not be located on docks. Fuel storage structures which are located on state uplands adjacent to tidelands or wetlands will have a physical barrier to prevent the flow of oil into coastal wetlands and tidelands.

G. Temporary Berms, Pads, or Ramps. Temporary berms, pads, or ramps constructed of beach gravels and sands should be restored to blend with original contours after the temporary access is no longer required, unless removal or restoration would cause more damage than leaving the berm, pad or ramp in place.

H. Public Access Adjacent to Water Bodies. Permits, leases, and plans of operation for commercial and industrial uses, transportation facilities, pipelines and other uses may be authorized on state uplands adjacent to tidelands if their activities are consistent with the management intent for the area and if they can maintain tideland access and protect adjacent fish habitat, public water supplies, and public recreation.

Where feasible and prudent, there should be setbacks between these activities and adjacent tidelands. The width of this setback may vary depending upon the type and size of the use, but will be adequate to maintain public access to and along tideland areas and adequate to protect water quality in accordance with DEC water quality standards. For non water-dependent uses, this setback to the extent feasible, should

never be less than 100 feet landward of mean high tide.

Where it is not feasible and prudent to maintain a setback adjacent to tidelands, other measures will be implemented to meet the intent of this guideline.

I. Clean-up Bonds. A site clean-up deposit should be required of tideland facilities that have the potential to create significant impacts if abandoned or improperly cleaned up.

J. Avoid Conflicts with Traditional Uses of Resources. See *Subsistence Activities and Traditional Uses*, Guideline A, page 2-43.

K. Other Guidelines That Affect Shoreline Development. A number of other guidelines will affect shoreline development activities. See the following sections of this chapter:

- Coordination and public notice
- Fish and wildlife habitat
- Public access
- Public and commercial recreation
- Subsistence activities and traditional uses
- Transportation and utilities

STREAM CORRIDORS & INSTREAM FLOW

Goals

Public Use. Provide opportunities for a variety of public use activities within publicly owned stream corridors, including subsistence and recreation activities.

Habitat. Protect riparian fish and wildlife habitats and harvest.

Private Ownership of Land. Provide opportunities for private ownership of land near streams.

Water Quality. Protect water quality to support domestic uses, fish and wildlife production, subsistence, and recreational activities.

Forest Products. Where consistent with the management objectives of a stream corridor, provide for the harvest of timber from riparian forests.

Management Guidelines for Stream Corridors

A. Priority of Public Uses in Stream Corridors. As a general rule, DNR will set a higher priority on protecting public use values in stream corridors than providing opportunities for private ownership of land. However, DNR recognizes the strong demand for property along streams and will provide land for private purchase in some stream corridors. Before lands in a stream corridor are disposed of, DNR in consultation with other affected agencies and the public, will assess existing and projected public use needs associated with the stream corridor. Disposals near streams with important public use value will be designed to protect access to, across, and along the stream for fishing, hiking, camping, and other public use activities.

B. Retention of Publicly Owned Buffers as a Management Tool in Stream Corridors.

1. When the management intent for land adjacent to a stream is to permit uses such as public roads, fishing, picnicking, hunting, timber harvest, building fires, camping, or other similar active uses, public ownership of stream buffers should be retained.

2. In state subdivisions, when it has been determined that stream buffers should be kept in public ownership (see B1 above), the buffers will either be retained in state ownership or dedicated to a local government. If streams in subdivisions have recreation, public use, or habitat values of regional or statewide importance, buffers should be retained in state ownership.

3. Publicly owned buffers adjacent to a stream may be retained along the full length of the stream or on the segments determined to have high current or future public use and habitat values.

4. The state will, to the extent feasible and prudent, discourage developments in areas of flooding, unstable ground, significant avalanche risk, and other hazards.

C. Retention of Access Easements as a Management Tool in Stream Corridors.

1. When the primary management intent is to protect the public's right to travel along or across a stream bank, an easement is preferred to establishing a public use area. The public rights reserved in an easement shall be explicitly defined and normally will include only the right of ingress and egress, inclusive of the right to pause briefly to observe wildlife, take photographs, or rest. On an individual basis, the state may reserve other rights (for example, the right to fish or picnic) as necessary to protect the public interest. The public use rights protected by previously established easements are not affected by this policy.

2. Easements along or across streams should establish the right to travel by foot, dogsled, horseback, and snowmobile (unless the use of

snowmobiles is prohibited in a given area). On an individual basis, the right to travel by all-terrain vehicles and wheeled vehicles may be reserved, where doing so is in the public interest. Easements should be reserved for roads or railroads only if they are likely to be built in the foreseeable future.

3. Easements and publicly owned buffers may be used in combination on a stream to provide opportunities for private ownership near the stream and still protect public use, access to public waters, or habitat values on other portions of the stream. Easements should not be used to encourage significant new or increased levels of public uses such as camping, hunting, and fishing. Easements and publicly owned buffers may be used on portions of a stream with important public recreation and habitat values when most portions of the stream are retained for public use, and access across private land is needed to reach public lands.

D. Establishing Widths of Publicly Owned Buffers, Easements, and Setbacks Along Streams.

1. Widths of easements, setbacks, and publicly owned buffers along streams will vary according to the management intent or guidelines described in Chapter 3 subunits for the stream and adjacent uplands. In addition, the buffer, easement, or setback width for any given stream may vary along the stream course depending on topography, vegetation, and land ownership. Establishing buffer, easement, or setback widths for particular streams will be based, at a minimum, on specific objectives: recreational activities to be accommodated, habitat protection and management, noise abatement, visual quality, water quality, prevention of river bank erosion, and land disposal. The buffer widths should be designed to protect the management objectives.

2. Although buffer and easement widths may vary among streams, a basic level of consistency is needed to avoid confusion about the widths of public use and access areas along the state's many streams; also, fieldwork and site analysis to establish separate widths for each stream

corridor would be prohibitively expensive. The following guidelines are intended to establish a reasonable degree of consistency in buffer, easement, and setback widths used by the department when disposing of an interest in state land.

- When it is determined that a publicly owned buffer is appropriate, a standard minimum buffer width (for example a staking setback) of 100 feet should generally be established landward from the ordinary high water mark on each bank.
- Where land near a stream is conveyed from state ownership, a minimum residential building setback of 100 feet will be established landward from the ordinary high water mark on each bank.
- To maintain the stability and function of streams and river banks, commercial and industrial development facilities and structures will not be located closer than 100 feet from the ordinary high water of river or stream unless the use or activity is water-dependent or water-related. The width of the setback will be adequate to maintain public access to riparian areas and protect water quality in accordance with water quality standards established by the Department of Environmental Conservation. Commercial or industrial uses and activities which are neither water-dependent nor water-related may occur only if there is no feasible and prudent alternative to meet the public need.
- When it is determined that a public access easement will be reserved along a stream, a minimum easement of 50 feet will be reserved landward from the ordinary high water mark on each bank.
- As a general standard, publicly owned buffers of at least 1/4 mile landward from the ordinary high water mark on each bank should be retained on streams recommended for legislative designation. Exceptions to this policy may be made where land ownership, topography, or the nature of anticipated public uses in a proposed legislative designation warrant.

E. Separation Between Waterbodies and Potential, Conflicting Uses. Where it is not feasible and prudent to maintain a setback of non-water dependent uses adjacent to fish habitat, public water supplies, or recreational waters, other measures will be implemented to meet the intent of this guideline.

F. Uses Allowed in Easements, Setbacks, and Publicly Owned Stream Buffers. Water-dependent structures, such as docks and boathouses, are allowed within easements, setbacks and publicly owned buffers. If a structure would block public access, alternative access will be provided.

G. Alteration of the Hydrologic System. To the extent feasible and prudent, channelization, diversion, or damming that will alter the natural hydrological conditions and have a significant adverse impact on important riverine habitat will be avoided.

H. Alteration of Floodplains. To the extent feasible and prudent, modification of floodplains to the point where they cannot perform their natural function will be avoided.

I. Soil Erosion. Soil erosion will be minimized by restricting the removal of vegetation adjacent to streams and by stabilizing disturbed soil as soon as possible.

J. Structures in Fish Habitat. See *Fish and Wildlife Habitat* Guideline C, page 2-7.

K. Water Intake Structures. See *Fish and Wildlife Habitat* Guideline D, page 2-7.

L. Protection of Life and Property. See *Settlement* Guideline C-1, page 2-30.

Management Guidelines for Instream Flow

A. Stream Uses to Consider for Instream Flow Reservations. DNR has statutes that establish a process for considering instream flow reservation. Under DNR's statutes, reservation of instream flow is possible for four types of uses:

1. Protection of fish and wildlife habitat, migration, and propagation. Instream flow reservations to protect habitat may be made for

streams that have anadromous or resident fish populations; flow into wetlands that support waterfowl, fur bearer or other wildlife populations; or provide the water supply needed for other habitat types that support wildlife populations.

2. Recreation and park uses.

3. Navigation and transportation uses.

4. Sanitary and water quality uses.

Other uses of water, such as hydropower (which is a diversion of water), are covered by the water rights statutes and regulations.

B. Priorities. Consumptive use of water and potential conflicts with instream water use are not significant issues in the Northwest area at present. There are no streams where near-term development is likely to result in consumptive use of water that will adversely affect instream water uses. No streams have been identified where development could result in increased demand for water consumption in the future. If development occurs on these waterways, instream flow studies may be needed to determine whether water reservations are needed to protect instream uses.

C. Process for Determining Reservations. The process for determining instream flow reservations is generally conducted by the applicant, and should include the following steps for each stream or other waterbody.

1. Identify the management objectives.
2. Estimate the quantity of water seasonally available by direct measurement (hydrograph), predictive methods (regional hydrographic models), or other appropriate methods.
3. Determine the quantities of water already appropriated.
4. In consultation with appropriate agencies, use site-specific studies or other information to determine the instream flow requirements for the resources and uses to be protected. For habitat resources this will require cooperative work and consultation with the Department of Fish and Game to identify necessary conditions for staging, reproduction, spawning, overwintering, and migration of valuable fish and wildlife resources.

D. Other Guidelines Affecting Stream Corridors. Several other guidelines may affect stream corridors. See the following sections of this chapter:

- Coordination and public notice
- Fish and wildlife habitat
- Forestry
- Grazing
- Heritage resources
- Materials
- Public access
- Public and commercial recreation
- Settlement
- Subsistence activities and traditional uses
- Subsurface resources
- Trail management
- Transportation and utilities
- Wetlands management

SUBSISTENCE ACTIVITIES & TRADITIONAL USES

The allocation of fish and wildlife resources among competing users is managed through the Alaska Boards of Fisheries and Game, not by DNR. DNR does manage state lands which support subsistence resources and uses. DNR also authorizes other land uses, and some of these uses may conflict with subsistence activities or traditional uses. DNR has the responsibility to manage state lands for multiple use and resolve or mitigate conflicts among competing beneficial uses including traditional uses and subsistence activities. (See: AS 38.04.015 and AS 38.05.830)

Goals

Maintain Land Base. Maintain most land and water in public ownership and protect important resources that support subsistence activities and traditional uses.

Ensure Access to Use Areas. Maintain or enhance access to subsistence and traditional use areas.

Support the Mixed Cash-Subsistence Economy. Recognizing the subsistence economy in Northwest Alaska, contribute to the stability of the mixed cash and subsistence economy in the region by providing opportunities for resource development that are in balance with and accommodate traditional uses and subsistence resources and uses.

Mitigate Adverse Effects. Avoid or minimize interference with subsistence activities or traditional uses when authorizing land and water use activities.

Management Guidelines

A. Avoid Conflicts with Traditional Uses of Resources. Subsistence uses and traditional activities are one of the principal uses of state land within the planning area. Therefore, activities authorized by the department will avoid or minimize significant conflicts with traditional uses, subsistence activities and subsistence resources. Significant conflicts will be avoided or minimized, when feasible and prudent, through

project design, siting, timing, or other management options. Appropriate mitigation measures should be determined through consultation in accordance with *Coordination and Public Notice* Guideline C, page 2-5, and *Fish and Wildlife Habitat* Guideline A and H, page 2-6 and 2-8.

B. Public Access For Subsistence and Traditional Uses. The department will maintain public access to subsistence and traditional use areas unless reasonable alternative access is provided.

C. Wood Harvest for Personal Use. An important objective of forest management is to allow people to harvest firewood and house logs from state land for their personal use. Therefore, state lands should be available for personal-use wood harvest when consistent with management intent and guidelines for the unit.

D. Coastal Policies. The Northwest Arctic Borough (NAB) and Bering Straits CRSA Coastal Management Programs have subsistence policies that the department will follow when authorizing activities in the appropriate coastal district. These coastal plan policies are particularly significant to the people of this region and are listed below. Additionally, special coastal plan areas are identified in the appropriate management units of Chapter 3.

BSCRSA Policy A-1. Subsistence use. Subsistence use of the coastal lands and waters of the Bering Straits CRSA has traditionally been the primary and highest priority use of all lands and waters within the coastal management plan area; therefore, all other land/water uses and activities shall ensure that through careful planning, development, and operation of a resource extraction or development project, all steps will be taken to mitigate adverse impacts to subsistence resources and their use in accordance with BSCRSA policy F-2.

NAB Policy A-1. Subsistence Priority. Subsistence use of coastal lands and waters has traditionally been the primary and highest use of all lands and waters within the coastal management plan area; therefore, all other land/water management uses and activities shall accom-

moderate the use of subsistence resources in the planning, development and operation of these activities.

E. Subsistence Activities and Traditional Land Uses. Many activities related to subsistence do not require the issuance of permits. These are called 'generally permitted activities.' Examples of generally permitted activities are hiking, dog-team travel, snow machining, camping and warming fires, boating, establishing fish camps or hunting camps when camps are for individual and temporary use, harvesting wild plants, berries, or plant materials for personal use, and securing dead or downed firewood.

Permanent structures, such as cabins, will require a permit or lease on state lands. DNR can presently authorize structures through permits for remote cabins, trapping cabins, temporary tent camps, or through a cabin lease. Leases for private, non-commercial cabins are prohibited.

F. Other Guidelines Affecting Subsistence Activities and Traditional Uses. Several other guidelines may affect subsistence activities and traditional uses. See the following sections of this chapter:

- Coordination and public notice
- Fish and wildlife habitat
- Forestry
- Grazing
- Heritage resources
- Materials
- Public access
- Public and commercial recreation
- Remote cabins and trapping cabins
- Settlement
- Stream corridors and instream flow
- Subsurface resources
- Trail management
- Transportation and utilities
- Wetlands management

SUBSURFACE RESOURCES

Goals

Mineral and Energy Supplies. Make metallic and nonmetallic minerals, coal, oil and gas, and geothermal resources available to contribute to the energy and mineral supplies and independence of the United States and Alaska.

Economic Development. Contribute to Alaska's economy by making subsurface resources available for development, providing stable job opportunities and stimulating growth of secondary and other primary industries.

State Revenues. Establish a stable source of state revenues.

Environmental Quality, Subsistence, and Cultural Values. When developing subsurface resources, protect the integrity of the environment, subsistence resources, and affected cultural resources to the extent feasible and prudent.

State Support for Mining. Aid in the development of infrastructure (such as ports, roads, or railroads) and continue to provide geologic mapping and technical support to the mining industry.

Locatable Mineral Development Guidelines

A. Lands Open to Mineral Entry. All state lands that are open to mineral entry are multiple use areas where mineral development will be accommodated and encouraged. Recognized exploration methods for locatable minerals will be allowed on all state lands unless specifically closed to mining and will be subject to the conditions of a land use permit. DNR may determine that some traditional forms of access for mining will not be allowed in specific areas to avoid resource damage.

Where an area is open to mineral entry, a miner has the right to stake a claim regardless of the surface use designation or classification. Any adverse effects of mining on surface resources or

uses will be managed through compliance with state laws and regulations and the management intent and guidelines of this plan.

B. Reclamation of Mineral Land. Land use permits and approved plans of operations for mineral developments will specify the measures required of the operator to reclaim the land to a useful condition. In the absence of other post-mining land uses identified by the Northwest Area Plan, such as settlement, developed recreation, or material sites, the primary purpose of reclamation will be to provide useful fish and wildlife habitat. Determination of the specific measures to be taken and whether or not a performance bond will be required will be done in consultation with the affected agencies and coastal districts. Specific measures may include storage and reuse of topsoil; disposal of overburden; regrading of tailings and revegetation; reestablishment of a natural drainage system; long-term erosion control measures; and removal of equipment, improvements, and other man-made items.

C. Access for Mineral and Coal Development. Existing roads and trails should be used to provide access to mine sites wherever feasible. Regulations for miscellaneous land use permits require that access will be managed so that damage is minimal. (See *Wetlands Management* Guideline F, page 2-60.)

D. Control of Visual Impacts. Guidelines will be developed on a case-by-case basis as necessary through the land use permit or leasing process to minimize the adverse visual impacts of mining, especially in settlement areas and recreation areas, such as along the Kobuk River. In such areas, stipulations should consider, at a minimum, the following items: control of solid wastes; removal of vegetation; siting of mining structures, tailings and overburden; roads; and rehabilitation of mining sites.

E. Approval of Plans of Operation. Using procedures established under existing leasing laws and regulations, DNR reviews plans of operation required for locatable mineral leases

and will consult with and carefully consider recommendations of the Department of Fish and Game (DF&G), the Department of Environmental Conservation (DEC), and appropriate coastal districts. DNR will approve plans of operation if they adequately address the guidelines of the area plan and applicable laws and regulations, and if it can be demonstrated that instream mining will not significantly affect salmon productivity. Violation of the plan of operations is cause for revocation of the approved plan of operation or termination of the lease.

F. Land Sales in Areas with Subsurface Resources. See *Settlement* Guideline C-5, page 2-31.

G. Avoid Conflicts with Traditional Uses of Resources. See *Subsistence Activities and Traditional Uses*, Guideline A, page 2-43.

Leasable Minerals Development Guidelines

A. Coal Exploration and other Leasable Minerals. State land in the Northwest Area may be leased or opened for coal prospecting permits if the department determines it is in the best interest of the state as required by AS 38.05.035. Before a permit is issued, DNR will determine if the surface values are significant enough to warrant restricting surface entry. Decisions on surface entry for coal adjacent to streams will be made in consultation with the affected agencies.

B. Access for Mineral and Coal Development. See *Locatable Mineral Development* Guideline C on page 2-45.

C. Land Sales in Areas with Subsurface Resources. See *Settlement* Guideline C-5, page 2-31.

Guidelines for Resource Values That May be in Conflict with Coal or Mineral Development

A. Background. The decision to apply mineral closures or locatable mineral leasing will be made by the commissioner within the parameters set by the Alaska Statutes. AS 38.05.185(a) requires that the commissioner determine that mining is incompatible with a significant surface use before an area can be closed to mining. The same section of the statutes requires that the commissioner determine that a potential use conflict exists before requiring that development of locatable minerals be conducted only under a lease.

In some circumstances, the commissioner may find that some resource values require locatable mineral leasing, closure, or a prohibition of coal leasing and prospecting to protect their continued productivity and availability. In other circumstances, care during mineral development is all that may be necessary to protect these resources. It is impossible to predict the degree of conflict that could occur between mining and any other resource value in all circumstances. Therefore, the following categories of resource values will be evaluated to determine if locatable mineral leasing, prohibition of coal leasing or prospecting, or another management option is needed to protect the continued productivity and availability of the resource in conflict.

1. Retained Lands with Significant Commercial, Industrial, or Public Use Values

- Lands with significant coal, oil and gas, scientific, educational, or other commercial potential.
- Lands recognized as future transportation corridors where access for pipelines, road, railroads, or other surface transportation infrastructure could be blocked or impeded by mining claims. (After the alignment is established, areas will be reopened if they are surplus land.)
- Lands and waters that provide unique or unusual opportunities for human use and enjoyment, such as fishing, hunting, trapping, photography, and fish and wildlife viewing, or contribute significantly to a community economy.

- Lands and waters that provide significant recreation opportunities, such as clear water rivers that are now or are expected to be important for recreation, key public access sites, and recreation facilities.
- Lands and waters that are the watershed of a community water supply.
- Sand and gravel pits, stone quarries, or other significant known material sites where development might be impeded if mineral claims were staked.

2. Retained Lands With Significant Fish or Wildlife Resources

- Lands and waters that support protected species of plants, fish or wildlife (bald and golden eagles), threatened species (Arctic peregrine falcon), or endangered species (American peregrine falcon).
- Lands and waters that support production or maintenance of fish or wildlife species that have significant economic, recreational, scientific, educational, or cultural values or which have been given special protection through state or federal legislation or international treaty.
- State game refuges, critical habitat areas, and sanctuaries. In decision memorandum 44 signed by the commissioner in January 1984, DNR set the statewide policy that in legislatively established Critical Habitat Areas and Wildlife Refuges mining will occur under lease, though the policy has not been implemented yet. Also, individual legislatively designated areas may be recommended for mineral closure, but such a closure would be decided case by case using the criteria found in AS 38.05.185(a).
- Other lands and waters not included above that are known to support unique or unusually large assemblages of fish or wildlife.

B. Areas Closed to Mineral Entry. Locatable mineral closures are the most extreme management tool that can be used by DNR to resolve subsurface and other resource conflicts. AS 38.05.185(a) requires that before an area of state land can be closed to mining or mineral location, the commissioner must make a written finding that mining would be incompatible with significant surface uses.

Using the criteria established in AS 38.05.185(a), DNR generally finds mining to be incompatible with the surface uses listed below and closes the area to mining or mineral location at specified times in the decision making process. However, each situation will be evaluated separately and a determination made that the requirements of AS 38.05.185(a) have been met.

1. Lands Offered for Sale or Transfer to Other Owners.

a. Areas Scheduled for Disposal. Land scheduled for commercial, industrial, or subdivision sale will be closed to mining and mineral location at the end of the first year of the Land Availability Determination System (LADS) process (that is, approximately two years before the anticipated land sale).

b. Homesteading Areas. Lands available for homesteading will be closed to mining and mineral location at the end of the first year of the LADS process (that is, approximately two years before the anticipated land sale). These areas will remain closed until the allowed number of homestead entries has occurred. At that time, those portions of the project area with few or no homesteads will be reopened for mineral entry and location unless it is determined that the settlement pattern that has resulted creates significant, irreconcilable land use conflicts.

c. Land Proposed for Exchange. Lands proposed for exchange or trade will be closed to mineral entry and location at the time a preliminary agreement to exchange the land is reached.

d. Land to be Transferred to Another Public Agency. Lands reserved for transfer to another public agency for development of a public facility or reserved as a future townsite will be closed to mineral entry and location at the time the area is classified "reserved use" or an Interagency Land Management Agreement is signed.

2. Retained Lands. Lands and waters that support production or maintenance of fish or wildlife species that have significant economic, recreational, scientific, educational, or cultural values, or which have been given special protection through state or federal legislation or international treaty. In the Northwest Area,

lands and waters in this category include bird rookeries and sheefish spawning areas identified in Appendix H. See also the *Subsurface Designation Summary* map in this section.

C. Leasehold Location Areas. Requiring that locatable mineral developments occur under a lease is a more flexible management tool than mineral closure. Therefore, mineral leasing is preferred over mineral closure as a management option to resolve conflicts between other significant resources and mining and mineral location. AS 38.05.185(a) requires that for mining to be allowed only under written leases issued under AS 38.05.205 the commissioner must determine that either there are potential use conflicts on state land or the land was mineral in character at the time of state selection. Under 11 AAC 86.135(b), if a surface disposal area is not closed entirely to mineral entry, it will be made available only by leasehold location. See "Mineral Lease" in the glossary in Appendix A.

After consultation with DF&G, affected coastal districts, and DEC, and concurrent with the designation of an area being open to locatable mineral entry under lease, DNR will identify potential conflicts between mining and other resources that need protection. DNR will also state the general nature of stipulations to be used in leases to protect those other resources. Within the Northwest Area Plan, no areas are currently recommended for leasehold location.

D. Coal Leasing. Within the Northwest Area, all state lands are available for coal leasing, except state uplands within one-quarter mile of one seabird rookery at Corwin Bluffs (see *Management Unit 1: Lisburne*).

Oil and Gas Guidelines

Although the Northwest Plan Area has been explored only minimally for oil and gas, some interest exists for the oil and gas potential of the area. Immediate exploration prospects are fairly low primarily because of depressed oil prices. The state has not leased any land for oil and gas exploration and development within the plan area, although Norton Bay (Sale 38) was first proposed in 1979, tentatively set for January 1983, and dropped in July 1982. Four sales--Icy Cape (Sale 53), Hope Basin (45), Offshore Icy

Cape (58), and Point Franklin (60)--were proposed in the 1986 leasing program but were dropped in 1987 due to state budget constraints and industry focusing on developed resource areas. Thirteen seismic permits have been issued in or near the planning area.

In the past, lease sales have been proposed for Selawik and Chukchi basins, but neither is on the current DNR five-year leasing program. If and when any areas in the Northwest Area are added to the five-year schedule, measures will be designed to protect current uses of the area. DNR will consider methods to protect particularly important areas such as coastal estuaries or upland river corridors. To assure that the public is informed and has the opportunity to comment, the Division of Oil and Gas, through its public outreach program, will request comments several times in the sale planning process, and will conduct public meetings or hold teleconferences in the area. The plan encourages the widest possible distribution of notices to the organizations listed in Appendix B, but recognizes that notifying each group in Appendix B is not necessarily a statutory or regulatory requirement and that failure to satisfy portions of this recommendation will not jeopardize the project. The coastal plan consistency process will apply in appropriate areas. See *Coordination and Public Notice Guidelines B and C*, page 2-5.

A. Exploration Techniques that Minimize Clearing. Where there are trees in the Northwest Area, exploration techniques that minimize the clearing of trees will be used wherever feasible in order to avoid altering valuable fish and wildlife habitats, avoid increasing access to sensitive areas, and avoid increasing the chance of bark beetle infestation. Clearing of forested areas through bulldozing, or other means, for the sole purpose of seismic exploration will not be approved by the Director of the Division of Oil and Gas unless there is no feasible alternative, and only after consultation with the Division of Forestry and the Department of Fish and Game and appropriate coastal districts.

To prevent bark beetle populations from building up beneath the bark of felled trees and infesting nearby living trees, white spruce that is felled must be hydro-axed, burned, buried or similarly disposed of, as required by the Division of Forestry.

B. Removal of Abandoned Facilities. Sites leased or permitted by the state and later abandoned must be rehabilitated. Facilities must be removed as well. Exceptions may be made if the site can be used for future purposes, if removal and rehabilitation would cause greater impacts than abandonment, or if the action is not in the state's best interest. The exception will be determined by the Director of the Division of Oil and Gas and the Director of Land and Water Management, after consultation with Alaska Department of Fish and Game and affected coastal districts.

C. Pipeline Design. Pipelines should be buried. Where conditions prevent burial, pipelines will be sited and elevated, ramped, or otherwise designed to allow free passage of big game animals.

D. Worker Education. Many people working on oil and gas exploration and development will not be aware of the environmental and social considerations essential to proper development of the sale area. Therefore, lessees shall include in any exploration or development plans a proposed training program for all personnel involved in exploration or development activities (including personnel of the lessees' contractors or subcontractors) for review and approval by the Director, Division of Oil and Gas.

The program should be designed to inform each person working on the project of specific types of environmental, social, and cultural concerns that relate to the individual's job. The program shall also be designed to increase sensitivity and understanding of personnel to community values, customs, and lifestyles in areas in which these personnel will be operating. Harvest regulations shall also be addressed in the program.

The program should be formulated and implemented by qualified instructors experienced in each pertinent field of study, and should employ effective methods to ensure personnel understand and use techniques necessary to preserve archaeological, geological, and biological resources. The program should be developed in consultation with regional or local people and organizations (such as organizations listed in Appendix B) who have the expertise and willingness to participate.

Lessees shall submit for review and approval a continuing technical, environmental, and social orientation briefing program for supervisory and

managerial personnel of the lessee and its agents, contractors, and subcontractors.

E. Oil and Gas Leasing. The plan defers any decisions regarding leasing for oil and gas to DNR's existing leasing process. No oil and gas lease sales are proposed in the current five-year program for state lands in Northwest Alaska.

Other Guidelines Affecting Subsurface Resources

Several other guidelines may affect subsurface resources. See the following sections of this chapter:

- Coordination and public notice
- Fish and wildlife habitat
- Heritage resources
- Public access
- Settlement
- Stream corridors and instream flow
- Subsistence activities and traditional uses
- Trail management
- Transportation
- Wetlands management

Land Allocation Summary

This plan determines whether lands are open or closed to mineral entry and where minerals are designated a primary surface use. A primary surface use designation for minerals is made in certain cases where there is currently intensive subsurface resource exploration or development of statewide significance or where major subsurface development is likely to occur within the 20-year planning period. Primary designations are established to recognize that mineral development is one of the major surface, as well as subsurface, activities in these areas.

Many of the state lands in Northwest Alaska were selected primarily for their mineral potential. Although about 18 percent of all lands in the Northwest Area were rated high or very high mineral potential, almost twice that amount, or 35 percent, of state-owned or state-selected lands show these values. Although there are numerous areas of high mineral potential throughout Northwest Alaska, few of them will be developed into large operating mines during the next 20 years. Numerous small placer mines

will continue to operate on the Seward Peninsula. Larger mining developments are likely at Red Dog and Lik, at the Big Hurrah prospect in southwest Seward Peninsula, and at large offshore dredges in Norton Sound.

Mineral Location. Mining is a primary use in nine subunits in the planning area. These areas were designated because of their high mineral values and because they currently contain subsurface resource development or are likely to be developed in the future. Mineral potential ratings were based on whole townships, however, portions of the designated lands have low or moderate mineral values.

Areas in the plan with surface designations for minerals include three types: mineral lands (primary use), minerals/habitat and harvest lands (co-primary uses), and coal/habitat and harvest lands (co-primary uses). The following areas have these designations.

Mineral lands

- 2d 2 areas: along the Inmachuk and Kugruk rivers and near Granite Mountain
- 3c the Ambler-Bornite mineral district
- 4d 2 areas: Kougurok and Ear Mountain
- 5d 2 areas: Casadapega and the greater Nome district

Minerals/habitat and harvest lands

- 2c 3 areas: the Red Dog district; along the Kiwalik and Kugruk rivers; near Granite Mountain
- 3b the Ambler-Bornite mineral district
- 4c the Taylor area
- 5c 3 areas: Council, Nome, and Casadapega

Coal/habitat and harvest lands

- 1c 2 areas: Kasegaluk Lagoon, south of Kukpowruk River; and west of Corwin Bluffs

Note: Subunit 2c near the Kugruk River (Chicago Creek) also has known coal deposits, designated minerals/habitat & harvest/coal lands.

Almost all state land in the plan area with the exception of 13 seabird nesting cliffs/areas and lands within one-quarter mile of these locations, as well as seven sheefish spawning areas including the streambed and an area 200 feet either side of ordinary high water line, will remain open to mineral entry for locatable minerals. To protect these habitat areas, 9,320 acres will be closed to mineral entry, less than one-tenth of a percent (.06 percent) of state lands in the planning area.

Settlement areas totalling 31,000 acres will be closed to new mineral entry prior to being offered for sale. Remote cabin areas have been configured to avoid areas with large numbers of mining claims.

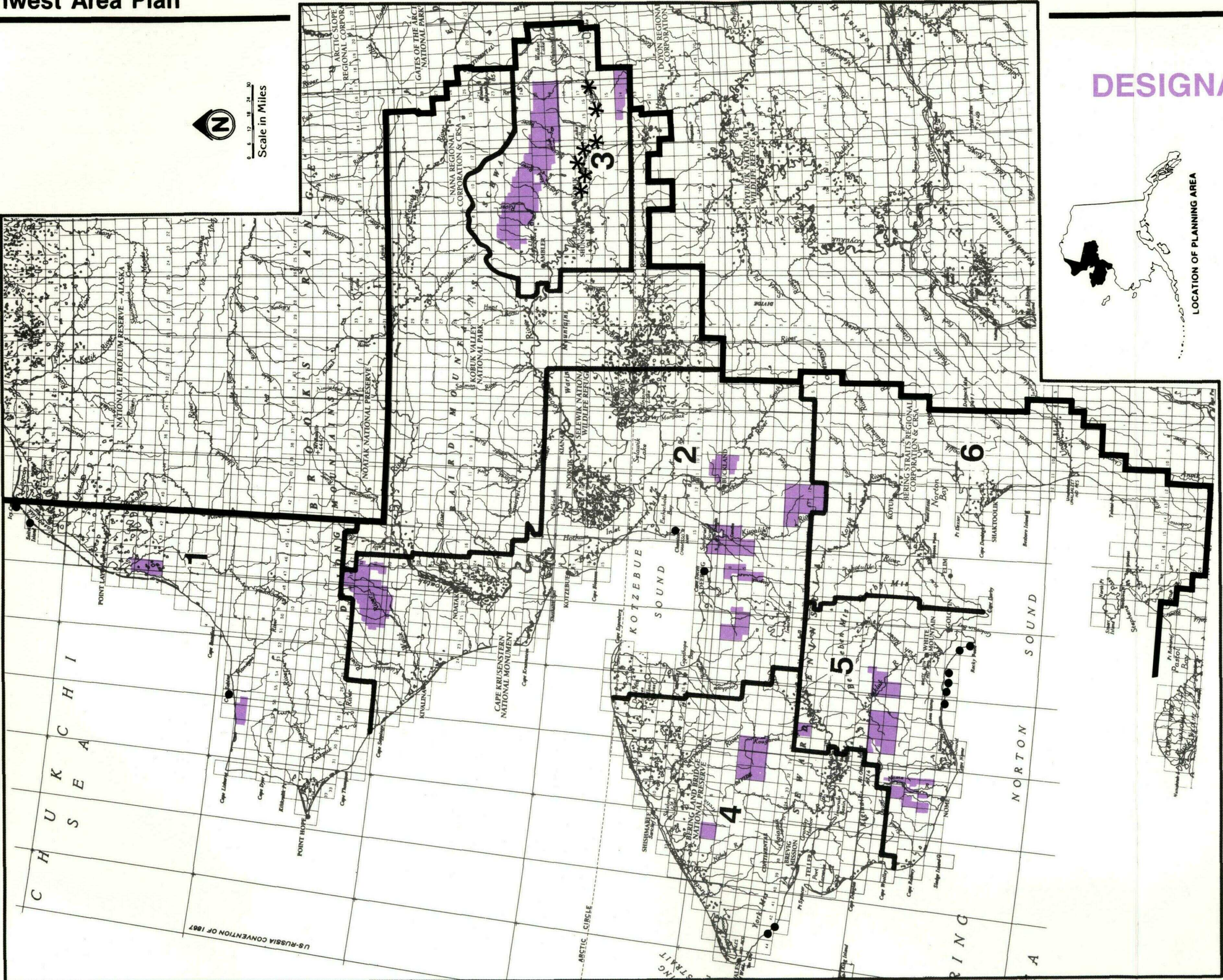
Mineral closures and other policies resulting from this plan neither alter nor replace existing regulations, nor do they affect existing mineral closures. The areas that are closed by the plan apply only to new exploration and development activities. Any existing leases, prospecting permits, or mining claims will not be affected.

Oil and Gas and Other Leasable Minerals.

All state uplands, tidelands, and submerged lands are available for oil and gas exploration. The plan defers any decisions concerning leasing for oil and gas to DNR's Five-Year Oil and Gas Leasing Program. No areas in Northwest Alaska are currently proposed for lease. Leases for other leasable subsurface resources such as coal will be offered on a case-by-case basis consistent with the management intent and guidelines of the unit. Varying degrees of oil and gas potential are known to exist for the Colville Basin, Selawik Basin, Brooks Range Foothills, and Brooks Range Province within the plan area.

Coal is potentially an important energy resource in the northwest region. All state land in the area is available for coal prospecting and leasing except one seabird nesting area. The Corwin Bluffs seabird rookery will, by plan guideline, remain closed to coal leasing. The area will remain open to leasing for other leasable minerals such as oil shale, sedimentary uranium, potassium, sodium, and geothermal resources. Any leases for coal or other leasable minerals will be dealt with on a case-by-case basis consistent with the intent of the appropriate management unit, plan guidelines, and existing laws and regulations.

SUBSURFACE
DESIGNATION SUMMARY



LOCATION OF PLANNING AREA

- MANAGEMENT UNIT BOUNDARY
- AREA PLAN BOUNDARY
- PRIMARY OR CO-PRIMARY MINERALS OR COAL DESIGNATION

AREAS CLOSED TO NEW MINERAL ENTRY

- BIRD ROOKERY AREA
 - State-owned or state-selected uplands and/or state tidelands within 1/4 mile radius of the bird rookery area

- SHEEFISH SPAWNING AREA
 - Streambeds and state-owned or state-selected uplands within 200 feet of ordinary high water mark

ALL OTHER STATE LANDS REMAIN OPEN TO MINERAL ENTRY

See Appendix H for more detailed maps and acreage descriptions of areas closed to new mineral entry. All remaining state lands are open for mineral location, except for the previously proposed settlement areas of Grand Central and Pilgrim which are closed to mineral location. Existing mining claims will not be affected by these closures. All state land including navigable waters that are open to mineral location are multiple use areas where mineral development will be accommodated and encouraged consistent with applicable state law and policies in the plan. All state lands are available for coal leasing, except near one bird rookery at Corwin Bluffs. All state lands are available for oil and gas leasing.

TRAIL MANAGEMENT

Special, regional, local, and neighborhood trails are the four categories of trails identified for management and are defined below:

Special trails are trails which require unusual management practices or buffer widths because of historical significance or unique values. Management guidelines should be developed for such trails on an individual basis. The Iditarod Race Trail and the Iditarod Historic Trails are the only special trails identified in the plan.

Regional trails are trails with high priority of use for the region and may include intercommunity trails, trails to important subsistence use areas with no other means of practical access, or trails used by more than one community. These trails are generally used for both motorized and nonmotorized access. Most intercommunity trails can be expected to see increased use as the region's population increases. Some regional trails may change as use patterns and resources shift over the long term.

Local trails are trails which provide access to subsistence use areas used primarily by one community. Local trails can also include important but seasonal access to mining or recreation areas. Some local trails may change as use patterns and resources shift seasonally or over the short term. Trails which connect villages or are used by more than one village are regional rather than local.

Neighborhood trails are trails which provide access within settlement areas. Since no communities are immediately adjacent to state lands, all guidelines for neighborhood trails will pertain only to trails within new settlement areas.

Goals

Public Use Opportunities. Ensure continued opportunities for public use of important subsistence, recreation, development, and historic trails.

Local and Regional Trails. Assist in establishing local and regional trail systems that provide access.

Special Trails. Manage special trails to protect historic resources and recreational opportunities as well as public access.

Neighborhood Trails. Protect access to trails within settlement areas.

Trail Setbacks. Protect or establish setbacks, buffers, easements, and rights-of-way to protect resources and uses along and adjacent to trails.

Management Guidelines

A. Management of Trail Buffers. Trail buffers are areas which have been kept in public ownership adjacent to land which has been sold or leased. Trail buffers generally will be managed to preserve trail use, minimize negative effects from adjacent land uses, and maintain the natural vegetation within the buffer. Timber sales, material sales, and leases for activities that impact the natural vegetation of the buffer will, to the extent feasible and prudent, be managed so as not to adversely affect the trail's use, physical nature, or aesthetic character. This guideline does not preclude trail crossings or rerouting of trails.

Buffers should be sized to minimize potential land use conflicts or negative effects of adjacent land uses, and protect the quality of the experience of the user. Buffer widths described in the guidelines that follow in this section may be increased to minimize conflicts between trail use and adjacent landowners, to protect the privacy of adjacent landowners, to separate motorized from non-motorized uses, to allow future siting of public facilities, to allow flexibility for rerouting, or to provide options for protecting long-term public uses, scenic resources, or environmental concerns. Buffer widths may vary along the length of a trail because of the above considerations. The width of a buffer on any portion of a trail should also be based on the management intent for adjacent public land described in Chapter 3. However, the minimum width of the buffer should be 100 feet (50 feet each side of centerline). Trail buffers should be located and designed in consultation with affected divisions of DNR, the Department of Fish and Game (DF&G), the Department of

Transportation and Public Facilities (DOT&PF), affected coastal districts and private parties, and appropriate community organizations (see *Coordination and Public Notice*, Guideline C, page 2-5). Activity areas of 10 to 40 acres may be identified along trails and reserved for other uses such as camping or rest areas.

B. Buffer Widths for Special Trails.

1. The Iditarod Race Trail. Where the Iditarod Race Trail passes through an area that is to be offered for settlement or other development, the trail will be located and protected by a publicly owned corridor 200 feet wide (100 feet on either side of the centerline). The corridor width may be expanded to minimize potential land use conflicts, reduce impacts of the trail on adjacent land uses, or to incorporate cultural and historic sites. Rerouting of the trail corridor may be permitted with the consultation of the Alaska Division of Parks and Outdoor Recreation, and the Iditarod Trail Committee or similar body in place at the time a decision is made, and in accordance with Guideline H, page 2-55.

No permanent structures or equipment should be placed in the trail corridor if they could adversely affect the trail experience or access along the trail. Where necessary, trail crossings may be permitted to allow access to lands on both sides of the trail. Crossings should be limited to a few discrete areas rather than scattered crossings in many places along the trail. In areas where the trail has been used previously for transporting heavy equipment to mining claims, this use will not be restricted unless there is significant potential for damaging the trail. If damage to the trail cannot be avoided, a feasible and prudent alternative route should be used or the activity should be permitted at a time that does not interfere with the race or trail conditions.

2. The Iditarod National Historic Trail System (INHTS). There are several trails and historic sites within the planning area that were identified as part of the INHTS. Some of these trails and sites are well defined while others are not. Minimum trail buffers will generally be wider than the 100-foot minimum (50 feet each side of centerline) established for regional trails. For permits and leases along the INHTS, the State Office of History and Archaeology will be

consulted in addition to other notice requirements.

The State of Alaska and the U.S. Department of the Interior have signed a memorandum of agreement covering management of the INHTS under terms of the Comprehensive Management Plan for the trail system. The trail will be managed in a manner consistent with the agreement.

C. Buffer Width for Regional and Local Trails.

Regional trails on state land shall be protected by a publicly owned buffer that has a minimum width of 100 feet (50 feet each side of center line). Local trails will be identified in accordance with Guideline E, below, and buffer widths will be established on a case-by-case basis.

D. Management of Trail Setbacks. Trail setbacks are areas of land along trails which are located on state land and are not adjacent to or encompassed by private lands. Trail setbacks serve to preserve trail use and minimize negative effects from adjacent land uses. Authorized activities will, to the extent feasible and prudent, be managed so as to not adversely affect trail use or the aesthetic character of the trail.

E. Identification of Trails. Before lands are conveyed from state ownership or leases and permits are issued, trails will be identified that merit consideration for protection by retention in state ownership, easement, trail buffer, or trail setbacks. The Division of Land and Water Management will be the lead agency for identification of trails and will consult with the other divisions of DNR, DOT&PF, DF&G, affected private land owners, and appropriate community organizations (such as those listed in Appendix B) when identifying trails and their uses. At a minimum, trail identification efforts will be based on the appropriate NWAP Working Maps for Trails and the Kotzebue Area and Nome Area Easement Atlas (see sources in Appendix C.) In addition, any agency, organization, or individual may identify public trails to be considered for protection.

F. Management of Neighborhood Trails. Neighborhood trails are protected through management plans or disposal design under guidelines recommended in DNR's subdivision

design manual. Once identified, trails will be recorded on the state's land record system and reserved through issuance of a right-of-way permit. The following criteria should be used to determine whether a neighborhood trail should be protected by easement or public ownership:

1. If the trail serves as a neighborhood collector trail that connects to a public open space system or regional or statewide trail, it will be kept in state ownership.
2. If the trail will be used almost entirely by neighborhood residents for travel within the entire disposal, it should be kept in state ownership or dedicated to the local government.
3. If the objective is to provide local pedestrian access between two lots to improve pedestrian circulation within a subdivision where a greenbelt and neighborhood trail system does not provide adequate access or where it is impractical to establish an integrated trail system described in 1 and 2 above, an easement may be used.
4. In cases of land offerings other than subdivisions (for example, land opened to homesteading), a publicly owned buffer or an easement will be used to protect trails. If a trail has the characteristics described in criterion 1 or 2 (above), it will be retained in public ownership. If a trail has the characteristics described in criterion 3, an easement will be reserved.

G. Trail Crossings. When it is necessary for powerlines, pipelines or roads to cross trail buffers, crossings should be at a 90° angle to the

buffer when feasible. Vegetative screening should be preserved at trail crossings.

H. Rerouting Trails. Rerouting of trails may be permitted to minimize land use conflicts or to facilitate use of a trail if alternate routes provide opportunities similar to the original. If trails are rerouted, provision should be made for construction of new trail segments if warranted by type of use. Rerouting trails should be done in consultation with affected divisions of DNR, DOT&PF, and DF&G, private land owners, affected coastal districts, and appropriate community organizations, such as those listed in Appendix B.

I. Other Guidelines Affecting Trail Management. Several other guidelines may affect trail management. See the following sections of this chapter:

- Coordination and public notice
- Fish and wildlife habitat
- Forestry
- Grazing
- Heritage resources
- Lakeshore management
- Materials
- Public access
- Recreation and scenic resources
- Settlement
- Stream corridors and instream flow
- Subsistence activities and traditional uses
- Subsurface resources
- Transportation and utilities
- Wetlands management

TRANSPORTATION & UTILITIES

Goals

These goals pertain to all forms of surface, air, and water transportation and all forms of utility or resource transportation corridors.

Support Plan Recommendations. Provide for a transportation system needed to implement plan recommendations and integrate it with other area-wide transportation needs.

Minimize Costs. Provide for a transportation system that minimizes possible long-range costs in all aspects of design, construction, operation, and maintenance and which avoids unnecessary duplication of facilities.

Minimize Adverse Impacts. Provide for a transportation system that has minimal adverse impact on the environment, scenic qualities, historic and cultural resources, and subsistence resources and activities.

Promote Efficient Land and Resource Use. Provide for a transportation system that uses land and energy resources efficiently and encourages compact, efficient development patterns.

Ensure Public Safety. Provide for a transportation system that has high standards of public safety.

Management Guidelines

A. Identification of Potential Transportation Routes. No major new transportation routes are necessary to support the land use designations made in this plan. Three possible corridors have previously been identified for the Northwest Area: the Western Access Corridor from Prospect to the Kougark Road, the Chicago Creek coal-mining-area to Kotzebue route, and the Northern Access Corridor to the Lik mineral deposit. No applications have been made for any of these routes. However, authorization for activities that could foreclose future development of these corridors should not be granted. If an application is made, DNR authorizations will be consistent with the policies and guidelines of this plan. In addition, the Department of Transportation and Public Facilities may require an evaluation of social,

economic, and environmental effects of the transportation routes in coordination with affected communities and coastal districts. To the extent feasible and prudent, DNR will not issue permits for the construction of major transportation routes until final decisions are made on the feasibility of these routes.

B. Access Plans for Land Offerings or Resource Development Projects. Before offering land for disposal or initiating a resource development project, DNR will work with DOT&PF to identify access routes and responsibilities for design, construction, and maintenance of proposed transportation facilities. Access plans will be developed in consultation with affected local governments, coastal management districts, and land owners.

C. Joint Use and Consolidation of Surface Access. Joint use and consolidation of surface access routes and facilities will be encouraged wherever feasible and prudent. Surface access should be sited and designed to accommodate future development and to avoid unnecessary duplication. The feasibility of using an existing route or facility should be evaluated before authorizing a new one.

D. Protection of Hydrologic Systems. Transportation facilities will, to the extent feasible and prudent, be located to avoid significantly impacting the quality or quantity of adjacent surface waters or detracting from recreational use of these waters. The following guidelines generally apply, although site-specific exceptions may be necessary:

- 1. Minimizing the Number of Stream Crossings.** The number of stream crossings should be minimized. When they are necessary to construct a road, the stream crossings should be made where the stream channel is stable and should traverse the channel in the most direct manner practical.

- 2. Minimizing Construction in Wetlands.** Construction in wetlands, poorly drained areas, and floodplains should be minimized and existing drainage patterns maintained. Culverts should be installed where necessary to enable free movement of water.

3. Properly Designing Bridges and Culverts.

Bridges and culverts should be large enough and positioned properly to avoid altering the direction and velocity of stream flow or interfering with migrating or spawning activities of fish, in accordance with A.S. 16, and with movement of wildlife. Bridges intended for permanent use should be large enough to accommodate at least the 25-year peak discharge (where known). Bridges and culverts should provide adequate clearance for boat, pedestrian, horse, and large game passage whenever these uses occur or are anticipated to occur at significant levels.

4. Rehabilitating Disturbed Stream Banks.

Disturbed stream banks should be recontoured, revegetated, or other protective measures should be taken to prevent soil erosion into adjacent waters.

5. Crossing Frozen Streams and Lakes. Where allowed, snow ramps, snow bridges, or other methods of access across frozen streams and lakes should be used to avoid cutting, eroding, or degrading of banks.

E. Protection of Fish and Wildlife Resources.

Important fish and wildlife habitats such as riparian areas, wildlife movement corridors, important wintering or calving areas, and threatened or endangered species habitat will be avoided when siting transportation routes unless no feasible and prudent alternative routing exists. Location of routes and timing of construction should be determined in consultation with the Department of Fish and Game (DF&G) and affected coastal districts. See also *Fish and Wildlife Habitat* Guideline H, page 2-8, to avoid conflicts with traditional uses of fish and game.

F. Road Pullouts. Where road corridors come in contact with streams, habitat corridors, or other areas of potential public use, sufficient acreage should be retained in public ownership to accommodate public access, provide for public health and safety, and allow for public use. The size and location of pullouts should be determined in consultation with the Division of Parks and Outdoor Recreation, DOT&PF, DF&G, and appropriate coastal districts and local communities.

G. Timber Salvage From Rights-of-Way. All timber having high value for commercial or per-

sonal use should be salvaged from rights-of-way cleared for construction.

H. Off-Road Vehicle Activity. Most off-road vehicle activity on state lands does not require a permit. A permit generally is not required to operate a snowmobile, jeep, pick-up, weasel, or similar vehicle on most state land. However, by statute and regulation, off-road use of vehicles such as snowmachines, jeeps, and small all-terrain vehicles may require a permit on lands designated by DNR as 'special use' lands, for crossing anadromous fish streams, and on specially designated areas such as state park system lands, fish and game sanctuaries, refuges, or critical habitat areas. Off-road vehicle restrictions are made for each particular area. In addition, use of larger vehicles will require a permit on any state lands.

When permits are issued for off-road vehicle use under 11 AAC 96, or in specially designated areas, they will require that disturbance of soils, vegetation, fish and wildlife populations, drainage patterns, and water quality be minimized. Operations should either be scheduled when adequate snow and ground frost are available to protect the ground surface, or should require the use of low ground pressure vehicles, the avoidance of problem areas, or other techniques to protect areas likely to be damaged. Existing roads and trails should be utilized to minimize impacts to the surface. Before permits are issued, the land manager will consult with affected agencies.

Off-road vehicle permits generally should not be granted for vehicle use in important wildlife habitats during sensitive periods. If such vehicle activity is essential, is consistent with the appropriate coastal management plan policies, and no other practical alternative exists, it should be allowed only as an occasional use. This policy will be applied only when significant wildlife populations are likely to be present. DF&G will be consulted to help identify important habitat areas and sensitive periods that might warrant this restriction.

I. Roadless Areas. To protect particular resources or forms of resource use, some areas may be designated roadless by the state or future local governments, and managed to exclude construction of roads. These areas would be designated during an interagency decision process, such as

the disposal review process or transportation planning process, conducted with public participation.

J. Other Design Standards. For other guidelines that affect the design of transportation structures, see DOT&PF's preconstruction guidelines.

K. Siting Utilities. Settlement support facilities, including generation and transmission structures or cables and buried sewage and water lines, will be sited to minimize adverse impacts on other valuable resources or uses. Appropriate authorizations should be in compliance with DEC regulations.

L. Other Guidelines Affecting Transportation. Several other guidelines may affect transportation. See the following sections of this chapter:

- Coordination and public notice
- Fish and wildlife habitat
- Forestry
- Grazing
- Heritage resources
- Materials
- Public access
- Public and commercial recreation resources
- Settlement
- Stream corridors and instream flow
- Subsistence activities and traditional uses
- Subsurface resources
- Trail management
- Wetlands management

WETLANDS MANAGEMENT

Goal

Protect Wetland Values. Protect the hydrologic, habitat, subsistence, and recreational values of important public wetlands. Land management practices will be directed to avoid or minimize adverse impacts on the following important functions of wetlands.

- Wetlands filter nutrients and sediment from upland runoff.
- Wetlands stabilize water supplies by storing excessive water during flooding and by recharging groundwater during dry periods.
- Wetlands provide important feeding, rearing, nesting, and breeding grounds for many species; related recreational use and aesthetic values also are important.

Management Guidelines

A. Definition of Wetlands. For purposes of inventory and management of wetlands, DNR will use the definition adopted by the Bering Straits Coastal Resource Service Area:

Those areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation adapted for life in saturated soil conditions.

For purposes of these management guidelines, wetlands are further divided into two classes: Class I are freshwater wetlands with a locatable stream outlet (the stream shall be considered part of the wetland); Class II are freshwater wetlands with no outlets. See *Shoreline Development*, page 2-37, for guidelines on activities on or adjacent to tidelands.

Activities in wetlands may also be subject to provisions of the Federal Clean Water Act and the U.S. Army Corps of Engineers permit requirements related to the Clean Water Act. Compliance with these guidelines in this plan does not replace the need to comply with federal requirements.

B. Retention of Wetlands and Land Adjacent to Wetlands

1. Class I wetlands and surrounding lands will remain in public ownership unless DNR determines, after research and analysis and consultation with affected agencies, that they do not have sufficiently high water quality, water supply, habitat, subsistence, or recreation values to merit public ownership. Restrictive use covenants and public access easements, rather than public ownership, may be used to protect Class I wetlands and associated buffers under conditions specified in C below.

See *Stream Corridors and Instream Flow*, Guideline F, page 2-41, for types of structures allowed in publicly owned buffers, easements, and covenants.

Class I wetland buffers that are to be retained in public ownership will include, at a minimum, a 100-foot strip adjacent to the wetland unless the conditions in B3 below are met.

2. Class II wetlands and surrounding lands will be evaluated on an individual basis through the land disposal process or a land management plan to determine whether public retention or other measures are necessary to protect their values. Criteria used in this evaluation will include the wetland's importance to water quality, water supply, habitat, subsistence, or recreation values, and the costs of retaining the wetland.

3. Wetland buffers will be increased from the standards established in item 1 (above) if necessary because of the potential for adverse impacts on wetlands from development on adjacent lands. If, for instance, surrounding lands are steep and have high erosion potential or the proposed use poses a high risk to water quality or other values, buffer widths will be increased accordingly. When steep conditions exist, general guidelines should be used for increasing buffer width: if a 10 to 40 percent slope exists, the buffer width should increase 25 percent; if the slope exceeds 40 percent, the buffer width should increase 50 percent.

Wetland buffers may be decreased if land adjacent to the wetland is stable and development or use of it does not pose a risk to water quality or other values such as wildlife or recreation. In some cases buffers may need to be decreased to allow for an adequate buffer or setback on a nearby, more valuable river or lake.

C. The Use of Restrictive Use Covenants, Public Access Easements, or Setbacks.

Restrictive use covenants, public access easements, or staking or building setbacks, rather than public ownership, may be used to protect Class I wetlands under the following conditions.

1. Where the configuration of the wetland is such that surveying the meandering boundary of the wetland would be excessively expensive. In this case an aliquot-part (rectangular) survey rather than a meander survey may be used along the edge of the wetland. This may result in small portions of wetlands being conveyed to private ownership. Where justified by the value of the wetland, restrictive use covenants, public access easements, building setbacks, or staking setbacks will be applied to ensure that those portions of wetlands and associated buffers conveyed to private ownership remain in a natural state and that public access and use are maintained.

2. Where an entire wetland is included within a parcel of land to be sold for private use. In this case, the wetland and associated buffer may be conveyed to private ownership. Where justified by the value of the wetland, restrictive use covenants should be used to ensure that the wetland and associated buffer remain in a natural state. If there is a stream outlet from such a wetland, public access easements shall be reserved adjacent to the outlet of the wetland.

D. Establishing Widths of Covenants, Easements, and Setbacks.

Widths of covenants, easements, and setbacks will be determined using the same criteria used in establishing the widths of publicly owned buffers (Guideline B-3).

E. Defining Wetland and Wetland Buffer Boundaries.

Boundaries should be defined through field inspection, interpretation of aerial photographs, or both. Field inspection is preferred, but will not always be possible because

of cost. Where wetlands are particularly valuable and field inspection is not possible, boundaries should be sufficiently generous to allow for errors in interpretation. This will often be the case where aliquot parts are used to define wetlands rather than meander surveys.

Where covenants are used to protect wetlands conveyed to private ownership, boundaries of where the covenants apply may be defined by aliquot parts, or otherwise described so the landowner can clearly define where the covenant applies.

F. Permits for Dredge and Fill in State-Owned Wetlands.

Permits that authorize dredging and filling in wetlands, including permits for gravel, sand, silt, and peat extraction and the construction of roads and pads, will not be granted unless the proposed activity will not cause significant adverse impacts to important fish and wildlife habitat or important ecological processes, or that no feasible and prudent alternative exists. Where it is not feasible and prudent to avoid such activities, other mitigative measures will be considered to meet the intent of this guideline. Permits will be consistent with coastal plan policies. See Fish and Wildlife Habitat, Guideline A, page 2-6.

G. Operation of Heavy Equipment in Wetlands.

Permits issued for activities that require the use of heavy equipment in wetlands that have important hydrologic, recreation, or habitat values will, to the extent feasible and prudent, require that damage to wetlands and wetland vegetation be avoided. Only winter access should be used in or across wetlands whenever feasible. DNR will consult with other affected agencies and coastal districts prior to issuing permits when the ground is not frozen.

H. Approval of Other Activities in State-Owned Wetlands and Buffers.

Activities such as establishing trails or issuing leases for commercial or noncommercial uses shall be considered on an individual basis. Such activities will be allowed by DNR in consultation with affected agencies, coastal districts, and communities, and only if they can occur without significant damage to the water, habitat, or recreation values of the wetland.

I. Other Guidelines Affecting Wetlands Management. Several other guidelines may affect wetlands management. See the following sections of this chapter:

- Coordination and public notice
- Fish and wildlife habitat
- Grazing
- Heritage resources
- Lakeshore management
- Materials
- Public access
- Public and commercial recreation
- Stream corridors and instream flow
- Subsurface resources
- Trail management
- Transportation and utilities

CHAPTER 3

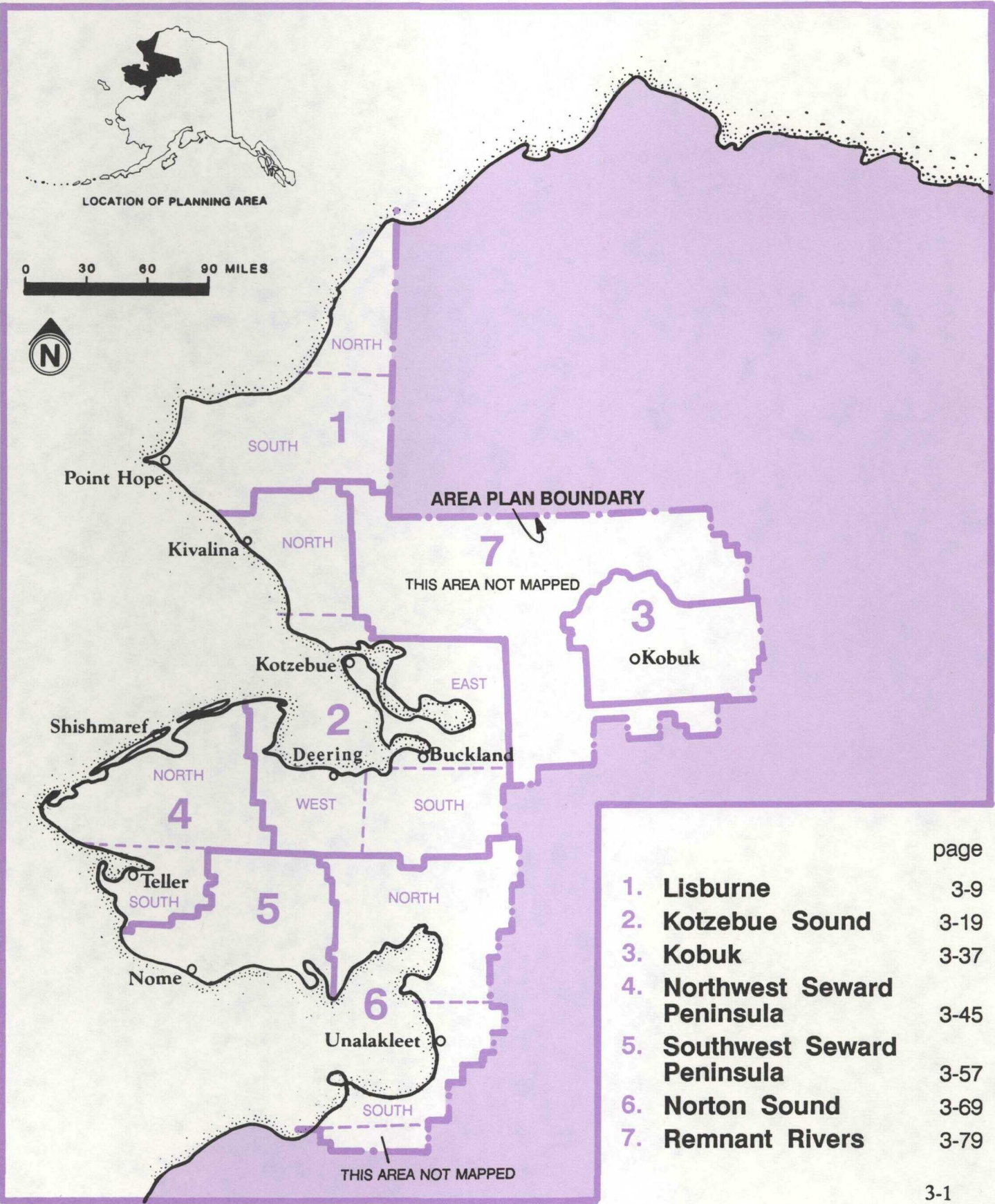
Land Management Policies For Each Managment Unit

	page
Introduction.....	3-3
Land Use Designations.....	3-3
Management Intent.....	3-4
Management Guidelines.....	3-6
Flexibility of the Plan.....	3-6
Management Unit 1: Lisburne.....	3-9
Management Unit 2: Kotzebue Sound.....	3-19
Management Unit 3: Kobuk.....	3-37
Management Unit 4: Northwest Seward Peninsula.....	3-45
Management Unit 5: Southwest Seward Peninsula.....	3-57
Management Unit 6: Norton Sound.....	3-69
Management Unit 7: Remnant Rivers.....	3-79



Village of St. Michael

MANAGEMENT UNIT INDEX MAP



Chapter 3

LAND MANAGEMENT POLICIES FOR EACH MANAGEMENT UNIT

Introduction

This chapter presents land management policies for specific sites within the planning area. The area is divided into seven management units by watersheds and socio-political boundaries. The management units are subdivided into subunits that have similar resources, topography, and land ownership. The following land management information is presented for each management unit:

Background - An explanation of the unit's location, land ownership pattern, and special jurisdictions introduces each unit. This section describes the major resources, uses, and communities in the unit, and summarizes access.

Management Intent - A statement of management intent defines near-term and long-term management objectives for the management unit. This section presents a general statement of management intent for the entire management unit, the methods to achieve these objectives, and a list of subunit types found in the management unit. Coastal plans are addressed where appropriate.

Management Guidelines - This section presents management guidelines that apply to certain subunits and to the entire unit. Specific guidelines, such as those for bird rookeries, anadromous stream mouths, land disposals, or remote cabins, are listed by subunit. The areawide management guidelines in Chapter 2 that are most likely to apply to the management unit are identified.

Resource Information Summary - Charts are provided that summarize the resource values in each unit. Special attention should be given to the known cultural resources, important trails, and A1 habitat areas shown on the charts because

particular guidelines in Chapter 2 policies apply to these areas.

Land Use Designation Summary - Charts are included that list primary land use designations, prohibited uses, and subsurface resource management policies for each subunit. These charts provide a quick picture of planned uses within a unit but must be used with the statement of management intent and the management guidelines to get the complete description of management policy.

Map of Land Ownership and Management Unit and Subunit Boundaries - A map of each management unit and the subunits within it is included. The maps show land status, subunit boundaries, and site-specific resources in the unit.

Land Use Designations

The plan presents separate land use designations for surface and subsurface resources. For surface activities, it designates the **primary and secondary land uses** for which each subunit is to be managed. A primary surface use is one that is of major importance in a management unit or subunit. The unit will be managed to encourage this use and its conservation or development. A secondary surface use is permitted within a subunit when it will not adversely affect achieving the objectives of the primary uses. A secondary use may be the main use for a limited area of the subunit.

The plan also identifies **prohibited surface uses** within each subunit. These are activities that will not be permitted within the subunit without a plan amendment. Uses not specifically prohibited may be permitted on a case-by-case basis if DNR determines that the proposed ac-

tivities are consistent with the statement of management intent for the management unit and subunit, and with applicable management guidelines.

Resource designations for "Minerals," "Materials," "Coal," and "Oil and Gas," generally are not applied as primary or secondary surface land use designations. The problems in locating and measuring subsurface resources make it difficult and misleading to apply these categories in the same way they are used for surface resources, such as timber. However, a primary surface designation for minerals or coal is used where intensive mineral exploration or development is currently taking place or is highly likely in the near term (5 to 10 years).

The department's policy for mineral development is shown by the **subsurface designations**, which state whether the subunit is open or closed to new mineral entry. All state land is open for new mineral entry except 13 important seabird rookeries and 7 sheefish spawning sites. Subsurface designations do not affect existing mining claims. All state land is available for coal or oil and gas leasing, except for coal leasing at one seabird rookery. Where a management unit is open to new mineral location and has a primary surface designation, such as wildlife habitat or public recreation, the surface designation will not be construed to prevent mineral development.

Management Intent

General. Almost all state land will be managed for multiple use including hunting, fishing, trapping, recreation, wood-cutting, subsistence activities, access, oil and gas, and mining. Exceptions are the five settlement areas, once the land is actually sold.

Almost all state land is open to mineral entry. Mineral closures will occur only at 7 sheefish spawning sites and at 13 seabird rookeries; coal leasing will not be allowed at one bird rookery.

Uplands along many main rivers in the Northwest Area are in federal, Native, or private ownership. The beds of all navigable rivers and lakes (called "shorelands") are state-owned, except for certain patented mining claims, and are subject to the guidelines in Chapter 2 and to any specific guidelines identified in Chapter 3 for individual

ivers. Where navigable rivers pass through state land, shorelands will be managed consistent with the guidelines in Chapter 3 for the adjacent uplands.

Nine primary land-use designations exist throughout the planning area (see *Subunits and Designations* discussion below). Secondary designations occur for grazing on the Seward Peninsula, recreation where existing use is documented, and forestry where trees exist. Appendix D explains the criteria used for primary and secondary land use designations. Important resource values are highlighted in the resource information summaries for each management unit.

Subunits and Designations. Each management unit contains several subunits. Each subunit fits one of the following nine land-use designations:

- Coal/habitat and harvest lands
- General use tidelands
- General use uplands
- Habitat and harvest/recreation lands
- Habitat and harvest tidelands
- Habitat and harvest uplands
- Minerals/habitat and harvest lands
- Mineral lands
- Settlement

The management intent for these land-use designations is described below, and applies to any subunit with that particular designation. Summary charts of the land-use designations are located with each management unit in this chapter. The general management intent described below and the Chapter 2 management guidelines provide direction for management of the subunits. Additionally, any special guidelines or variations in management intent are described for that subunit in the individual management units in this chapter. Designations for tidelands also apply to the adjoining submerged lands.

- **General Use Tidelands** - Tideland areas often receive significant use and traffic by residents of nearby communities for hunting, fishing, and access to many other activities. These subunits will be retained in public ownership and managed for multiple use. Management guidelines will be used to protect important coastal fish and wildlife

resources and access to these resources. These coastal areas are generally more suitable for development activities than adjacent habitat and harvest tidelands subunits. These areas will remain open for mineral entry except within one-quarter mile radius of 2 bird rookeries on adjacent state uplands (see Appendix H for further details).

- **General Use Uplands** - These subunits generally have low surface and low subsurface resource values. They are remote and relatively inaccessible areas. Much of this land is used for reindeer grazing and subsistence. This state land will be retained in public ownership, and managed for multiple use. These areas will remain open for mineral entry except within one-quarter mile radius of 3 bird rookeries on adjacent state uplands (see Appendix H for further details). There is no primary resource value on this land.

- **Habitat and Harvest/Recreation Lands** - These subunits have high habitat and harvest value and important recreation and subsistence values. The subunits offer habitat for moose winter range, caribou migration and winter range, waterfowl fall habitat and migration, brown bear, resident and anadromous fish, and sheefish spawning (on the Kobuk River). These subunits also provide the most popular floating and camping rivers in the planning area. These rivers are also important for fishing, hunting, subsistence, and transportation.

The state land in these subunits will be kept in public ownership and managed for multiple use, with emphasis on fish and wildlife habitat and harvest and public recreation, until detailed management recommendations are developed (see Chapter 4, *Recommendations for Further Study*, page 4-7). Several small areas that are the only known sheefish spawning areas in the Kobuk River system will be closed to new mineral entry (see Appendix H for further details). All other state land will remain open to mineral entry.

- **Habitat and Harvest Tidelands** - Habitat values are generally high throughout these subunits. Productive marine mammal areas, seabird rookeries, and anadromous stream

mouths are common. Tideflats, lagoons or inlets, and submerged lands provide important habitat for ducks and geese, herring spawning, overwintering fish, and land mammals. These areas are extensively used for hunting, fishing, subsistence food-gathering, recreation, and access. Cultural resource sites are known to occur, or have a high probability of occurring in these subunits.

The state land in these subunits will be retained in public ownership and managed for multiple use. Management of these subunits will emphasize the habitat values and human use of the area. These areas will remain open for mineral entry except within one-quarter mile of certain important bird rookeries noted on the management unit maps (see Appendix H for further details). State land authorizations will protect continued public access along the coast.

- **Habitat and Harvest Uplands** - These subunits are comprised of high value habitat lands, which support moose, caribou, anadromous fish, and brown bear. Important reindeer habitat exists on the Seward Peninsula. Waterfowl and shorebirds feed and nest in the associated wetlands of the subunit. Mineral values are variable. Cultural sites are found along rivers. Several trails and access routes exist in these subunits. Trees, important for fuelwood and building materials, are found in these subunits in the eastern part of the Seward Peninsula and along the Kobuk River and its tributaries. Area residents use these subunits extensively for subsistence resource harvest, for access and travel routes, and for recreation; out-of-region residents also use these areas for hunting, fishing, and recreation.

State land in these subunits will be retained in public ownership. Management of these subunits will be for multiple use with emphasis on fish and wildlife habitat and harvest. When permitting activities on state land, guidelines will be used to protect the habitat and continued access to the area. These subunits will remain open to mineral entry except within one-quarter mile of certain important seabird rookeries described in the management units (see Appendix H for further details).

- **Mineral Lands** - These subunits contain high or very high mineral potential and numerous mining claims. These subunits also may be important for subsistence activities. The mineralized areas are under development or are likely to be developed in the near term (5 to 10 years). The subsurface values are primarily for placer gold at several locations on the Seward Peninsula, and for copper, gold, and silver in the eastern Ambler/Bornite area. Habitat values in these subunits are lower than those in minerals/habitat and harvest subunits, and include moose, brown bear, and caribou habitat.

The state land in these subunits will remain in public ownership, open to mineral entry, and managed for multiple use, with emphasis on mineral development. Existing public access will be protected when authorizing state land uses.

- **Minerals (or Coal)/Habitat & Harvest Lands**- These subunits contain land with high or very high mineral or coal potential, numerous mining claims, and important wildlife habitat and harvest areas. The mineralized areas are currently under development or are likely to be developed in the near term (5 to 10 years). The subsurface values are primarily for placer gold at several locations on the Seward Peninsula, lead-zinc in the Red Dog area, copper, gold, silver in the Ambler area, and coal on the Lisburne Peninsula and near Chicago Creek on the Seward Peninsula. Important wildlife species usually include caribou, moose, brown bear, ducks, geese, and resident and anadromous fish. Important reindeer habitat is found on the Seward Peninsula. These subunits are accessible by boat, trail, road, or air, and generally are subject to harvest pressure and mining activity. Cultural resource sites in these subunits are often related to historical mining activity.

The management of these subunits will be for multiple use. They will be retained in public ownership and open for mineral entry, except for one seabird rookery (see Appendix H for further details). Management will emphasize mining, and fish and wildlife habitat and harvest. Guidelines in Chapter 2 will be

used to allow potentially conflicting uses to occur compatibly.

- **Settlement** - Settlement subunits have been identified for potential land disposal. They generally have land with scenic values and attractive amenities, such as public and private recreation, personal-use timber, and relatively easy access.

These subunits will be available for disposal of parcels of land into private ownership. State land that is not sold will be managed for multiple use, including forestry, habitat and harvest, and public recreation. These subunits will be closed to new mineral entry prior to disposal of the land. Guidelines in Chapter 2 have been designed to protect other public values and will be implemented through the land disposal process.

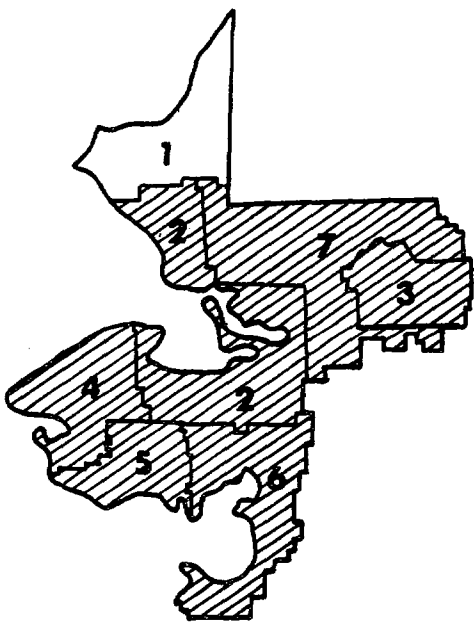
Management Guidelines

Except for lands that will be offered for private ownership, almost all state land addressed by this plan will be managed for multiple use. For this reason, the plan establishes management guidelines that will allow various uses to occur without serious conflicts. Management guidelines can direct the timing, amount, or specific location of different activities to make the permitted uses compatible. Additionally, *Coordination and Public Notice* guidelines in Chapter 2 (see page 2-5) encourage community input on proposed activities on state land.

Flexibility of the Plan

The land use designations shown on the following chart and management unit maps are intended to be flexible. Uses not shown may be permitted on a case-by-case basis if DNR determines they are consistent with the statement of management intent for the management unit and subunit and the applicable management guidelines. DNR may make minor boundary adjustments of land use designations shown on the maps in this chapter through on-the-ground implementation activities--for example, site planning for disposals--if the modifications adhere to the management intent for the affected subunits. Similarly, uses not designated in the plan may be

permitted if they are consistent with the management intent. Because it covers such a large area, the plan will not provide individual answers for all the site-specific issues encountered by state land managers. The plan does, however, clarify the general management objectives for the Northwest Area and thereby provides the basis for more informed decisions.



Management Unit 1: LISBURNE

Background

Location and Land Ownership. The Lisburne Unit includes the lands on the Lisburne Peninsula west of the National Petroleum Reserve, within the North Slope Borough. Most of the land in this unit is Native corporation land. The remainder is mainly a mix of state-owned and state-selected land. The unit also contains small parcels of private land, such as Native allotments and patented mining claims. Much of the state-selected area overlaps Native selections. The state also owns all the tidelands and submerged lands within three miles of the coast and the protected inland waters in this unit, such as Kasegaluk, Omalik, and Mapsorak lagoons, and Marryat Inlet. Federal lands at Cape Thompson and Cape Lisburne are within this unit, and are part of the Alaska Maritime National Wildlife Refuge.

Resources and Land Use. This unit includes the communities of Point Lay and Point Hope. Resources in the unit are used mainly by residents of Wainwright, Point Lay, Point Hope, and Kivalina. Hunting, fishing, egging, whaling, and trapping are the major human uses of the state uplands and tidelands in this area. The lands and waters provide habitat for moose, brown bear, polar bear, caribou, furbearers, ducks and geese,

belukha whales, salmon, whitefish, char, and capelin. Coal, oil and gas, and mineral resources underlie some state and Native lands. Some coal deposits are being studied for economic feasibility, but there is no active mining at present. The oil and gas potential of the Lisburne Management Unit is the highest of the entire planning area. State oil and gas lease sales were proposed for the Icy Cape area, but have been postponed.

Access. Access is difficult to most of this unit. The main access is by boat and trail along the coastline and along major rivers. Boatable rivers include the Utukok, Kokolik, Kukpowruk, Ipewik, Pitmegea, Kukpuk, Ayugatak, Akalolik, Kugirarok, Uyakturok, Ogatoruk, and Wulik. Airports exist at Point Hope and Point Lay. Wheelplane landings are feasible along much of the outer coast, in the Lisburne Hills, and along portions of the Wulik River.

Management Intent

General. State land in this unit will be kept in public ownership and managed for multiple use. Except for three seabird colonies, state land within the unit will remain open to new mineral

entry. All state land in this unit will be available for leasing for oil and gas. All state land is available for coal leasing except within one-quarter mile of the seabird rookery at Corwin Bluffs. State shorelands in this unit will be managed consistent with the general management intent described on page 3-4.

Subunits. There are five subunits in the Lisburne management unit: 1a (habitat and harvest tidelands), 1b (general use uplands), 1c (coal/habitat and harvest lands), 1d (general use tidelands), and 1e (habitat and harvest uplands). The general management intent for these subunits is described on pages 3-4 to 3-6.

The *Resource Information Summary* chart for this unit highlights important resource values found in each subunit. The summary is based on information from various resource reports prepared for the plan (see appendices C and D).

The *Land Use Designation Summary* chart for this unit provides a quick picture of planned uses for each subunit. For a complete description of management policy, the chart must be used with the statement of management intent and the management guidelines.

Coastal Plans. State land within 25 miles of the coast and along the Kukpuk River is within the North Slope Borough Coastal Management Plan (CMP) boundary (see maps in Appendix J). Activities on state land within this unit will be managed consistent with CMP policies. In this unit, two areas have been recommended for Areas Meriting Special Attention (AMSA) designation by the coastal management program: Cape Thompson, and the Kasegaluk Lagoon and barrier island tidal system. When this designation is adopted for these areas, management of state land within the AMSAs will be consistent with AMSA policies.

Management Guidelines

Bird Rookeries and Subsurface Resources (Subunits 1a, 1c, 1d, and 1e). The occurrence of unique nesting habitat on the barrier islands and seacliffs, and the presence of abundant food resources in nearby offshore waters enable the area to support some of the north-

ernmost seabird colonies. Nine species of seabirds regularly breed on the seacliffs--most prominent are the common murre, thick-billed murre, and black-legged kittiwake. Murres and kittiwakes are found in large colonies. Lesser colonies of pelagic cormorants, glaucous gulls, black and pigeon guillemots, and horned and tufted puffins are also present.

Most state land in these subunits remains open to new mineral entry. However, state uplands within a quarter-mile radius of three seabird colonies--Solivik Island, Icy Cape Spit, and Corwin Bluffs--will be closed to new mineral entry to protect this important habitat (subunits 1e and 1c). These colonies are shown on the *Subsurface Designation Summary Map*, page 2-51, and described in detail in Appendix H, *Mineral Orders for the Northwest Area Plan*. Coal leasing will not be allowed on state uplands or tidelands within a quarter-mile radius of Corwin Bluffs seabird rookery (subunit 1c). The tidelands are closed to coal leasing, but not to mineral entry because of the high coal potential and likelihood for conflicting uses. For other guidelines that apply to bird rookeries on state land within these subunits, see *Fish and Wildlife Habitat* Guideline K, page 2-8.

Commercial Recreation (Subunits 1a, 1c, 1d, and 1e). *Public and Commercial Recreation* Guideline D, page 2-23, describes state management for commercial recreation. For these subunits, this guideline prohibits commercial recreation leasing in the following areas: 11 anadromous stream mouths or enclosed estuaries, 4 marine mammal haulouts, and 20 seabird rookeries, as shown on the management unit map.

Mouths of Anadromous Streams or Enclosed Estuaries (Subunits 1a and 1d). *Fish and Wildlife Habitat* Guideline J, page 2-8, describes state management for mouths of anadromous streams and narrow openings of enclosed estuaries, such as lagoons, inlets, or basins. These areas are shown on the management unit map. For many of these stream mouths and estuaries, the location of the opening is dynamic, and the guideline will apply to their location at the time of a proposed action. Within these subunits, this guideline applies to the following areas:

Anadromous Streams

Kokolik River
Kukpowruk River
Kukpuk River
Pitmegea River
Utukok River

Enclosed Estuaries

Akunik Pass
Icy Cape Pass
Kukpowruk Pass
Marryat Inlet
Naokok Pass
Utukok Pass

Selections (Subunits 1b and 1e). The plan recommends selecting blocks of land on the Lisburne Peninsula for high mineral and coal potential, oil and gas potential, and consolidation of land ownership patterns. The state should also consider selecting areas of mineral or oil and gas potential when they are reconveyed to the Bureau of Land Management from Arctic Slope Regional Corporation. See further description in Chapter 4, *Proposed State Land Selections*, page 4-1.

General. The complete set of areawide guidelines is presented in Chapter 2. The *Resource Information Summary* charts for this unit identify important trails, known or probable heritage sites, and other resource values in specific subunits that are addressed by the appropriate guidelines in Chapter 2. Any Chapter 2 guidelines could apply to certain uses within this management unit. Those most likely to apply are

Coordination and public notice
Fish and wildlife habitat
Heritage resources
Public and commercial recreation
Subsistence activities and traditional uses
Subsurface resources
Trail management

RESOURCE INFORMATION SUMMARY

Management Unit 1: Lisburne - Page 1 of 2

RESOURCE	SUBUNIT		
	1a	1b	1c
Fire protection	N/A	Modified protection for Lisburne Hills and west of hills. Remainder of units limited protection.	Limited
Fish and Wildlife	A1: at four mouths of anadromous streams, 19 bird rookeries. A2/B1: belukha, polar bear, caribou, moose, brown bear, ducks & geese, capelin spawning, anadromous fish.	B2; brown bear, moose, polar bear, ducks & geese (in northern portion), caribou.	A1: one bird rookery at Corwin Bluffs. Mostly B1/A2, southeastern portion B2; polar bear denning, moose, caribou, brown bear, ducks & geese, anadromous fish & capelin spawning.
Forestry	N/A	None	None
Heritage Resources	Known sites at Pt. Lay & southern Kasegaluk Lagoon, along coast from Cape Lisburne to Corwin Bluffs; probable sites from Cape Thompson to Mapsorak Lagoon.	Probable sites along Epizetka R.; around Kuvirok, Tunusiktok, Munik, and Pugutak lakes.	Known sites along Kasegaluk Lagoon and from Cape Lisburne to Corwin Bluffs.
Important Trails	Kotzebue - Barrow winter trail along coast. Kivalina to Cape Thompson heavily used.	Important trail access along Kukpuk River inland to Cape Sabine; Kokolik River trail.	Kukpowruk River trail.
Minerals	Unknown; known coal deposits along coast south of Kukpowruk R.	Mostly low and moderate, some high, some very low. Mostly low coal potential.	Known coal deposits west of Corwin Bluffs and along Kasegaluk Lagoon south of Kukpowruk R; high coal potential; low mineral potential.
Oil & Gas	Northern portion within past proposal for Icy Cape lease sale (moderate potential). Remainder low or unknown. Hope Basin offshore from subunit.	Northern portion within past proposal for Icy Cape lease sale (moderate potential). Remainder low or unknown.	Northern portion within past proposal for Icy Cape lease sale (moderate potential). Remainder low or unknown.
Public access	Wheelplane landings at Point Lay, Point Hope, and along outer coast except Point Hope to Cape Lisburne; boat & trail access along coastline; three passes provide boat access from Chukchi Sea to Kasegaluk Lagoon.	Plane landing site in Lisburne Hills. Boatable rivers include Ayugatak, Akalolik, Kugirarok, Uyakturok, Ogatoruk; local trails, trail along Kokolik R.	Local trails; boat on Kukpowruk R; wheelplane access along coast.
Recreation	Unknown	Potential along Avak R.	Potential along Kukpowruk R.
Reindeer Grazing	N/A	None	None
Settlement Suitability	N/A	Mostly unsuitable with low potential one mile from access points, and along Kokolik R.	Mostly unsuitable; low to moderate along Kukpowruk R.
Subsistence	Subsistence use in this unit has been documented by studies of the DF&G, Subsistence Division, for the communities of Ambler, Buckland, Deering, Kivalina, Noatak, Noorvik, Point Hope, Point Lay, and Wainwright. Subsistence use by other communities—such as Barrow and Kotzebue—is known to exist, but the extent of their use has not been documented in studies for the NWAP.		

See Appendix C for a list of reports with more detailed information, and Appendix D for definition of ratings.

RESOURCE INFORMATION SUMMARY

Management Unit 1: Lisburne - Page 2 of 2

RESOURCE	1d	SUBUNIT	1e
Fire protection	N/A	Limited	
Fish and Wildlife	A1: one bird rookery and one anadromous stream mouth (Pitmegea R.); B1: belukha, ringed seal, walrus, bowhead, brown bear, moose, caribou.	A1: four bird rookeries, one anadromous stream mouth (Utukok R.); A2/B1: Polar bear denning, moose, brown bear, caribou, ducks & geese on coast, capelin spawning, anadromous fish. Areas upgraded for human use; lower Utukok R., Kukpowrak drainage uplands near Omalik Lagoon, lower Kukpuk R. and uplands either side of Kukpuk R.	
Forestry	N/A	Low to none	
Heritage resources	Probable sites along coast.	Known sites near mouth of Kugachiak R. along Kukpowruk River near Chevron Hill, along Wulik R. west of Sheep Mountain, and from Cape Lisburne to Corwin Bluffs. Probable sites near Kisimilok Mtn. along Epizetka R.	
Important Trails	Kotzebue - Barrow trail.	Kokolik R. trail; Utukok R. trail.	
Minerals	Unknown; few claims along Chucki Sea area from Cape Dyer to Cape Beaufort; known coal deposits along coast from Corwin Bluff to Cape Beaufort.	Low and moderate. Medium to high coal potential along Alalolik Creek and near Taktalak Creek. "Mostly low coal potential in remainder of unit.	
Oil & Gas	Northern portion within past proposal for Icy Cape lease sale (moderate potential). Remainder low or unknown.	Unknown potential within Lisburne Hills. Low potential in remainder of unit. Portions within past proposal for Icy Cape oil and gas lease sale.	
Public Access	Wheelplane access along coast.	Plane landing site at sheep ranch and along coast. Boatable rivers include Ipewik, Pitmegea, Kukpuk, Utukok; trail along Utukok R. and Kokolik R.; local trails.	
Recreation	Unknown	Potential along lower Utukok and Avak Rivers.	
Reindeer Grazing	N/A	None	
Settlement Suitability	N/A	Mostly unsuitable. Some low near access points and moderate potential near Chevron Hill; some low to moderate along lower Utukok R. & Kokolik R.	
Subsistence	Subsistence use in this unit has been documented by studies of the DF&G, Subsistence Division, for the communities of Ambler, Buckland, Deering, Kivalina, Noatak, Noorvik, Point Hope, Point Lay, and Wainwright. Subsistence use by other communities--such as Barrow and Kotzebue--is known to exist, but the extent of their use has not been documented in studies for the NWAP.		

See Appendix C for a list of reports with more detailed information, and Appendix D for definition of ratings.

LAND-USE DESIGNATION SUMMARY

MANAGEMENT UNIT 1 - LISBURNE

SUBUNIT	LAND USE DESIGNATIONS			COMMENTS
	PRIMARY SURFACE USE ¹	PROHIBITED SURFACE USE ²	SUBSURFACE ³	
1a	Habitat & harvest tidelands	Remote cabins Commercial rec. leases in some areas	Open	
1b	General use uplands	Land disposals Remote cabins	Open	1/2 township proposed for state selection
1c	Coal/ Habitat & harvest lands	Land disposals Remote cabins Commercial rec. leases in some areas	Open, except within 1/4 mile of 1 seabird rookery	
1d	General use tidelands	Remote cabins Commercial rec. leases in some areas	Open	
1e	Habitat & harvest uplands	Land disposals Remote cabins Commercial rec. leases in some areas	Open, except within 1/4 mile of 2 seabird rookeries	Approximately 4 townships pro- posed for state selection

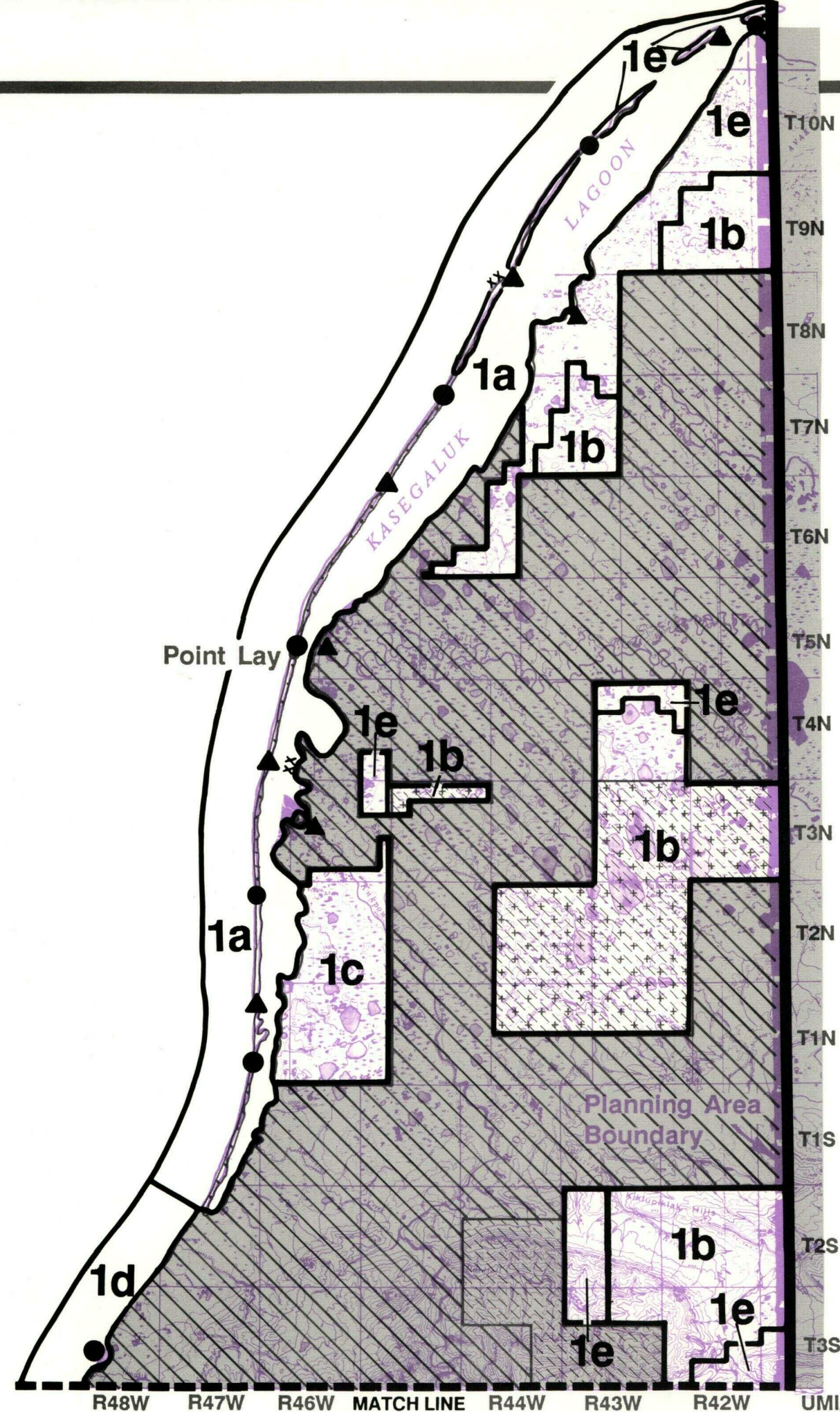
¹No secondary use was identified.

²Other uses such as material sales, land leases, or permits that are not specifically prohibited may be allowed. Such uses will be allowed if consistent with the management intent statement, the management guidelines of this unit, and the relevant management guidelines listed in Chapter 2.

³Except for coal leasing at the Corwin Bluffs rookery (in subunits 1a and 1c), all areas are available for leasing for leasable minerals. Statements of whether or not the unit is open to mineral entry refer only to locatable minerals. See glossary in Appendix A for definitions of leasable and locatable minerals. See Appendix H for detailed descriptions of areas closed to mineral entry.

Northwest Area Plan

LISBURNE

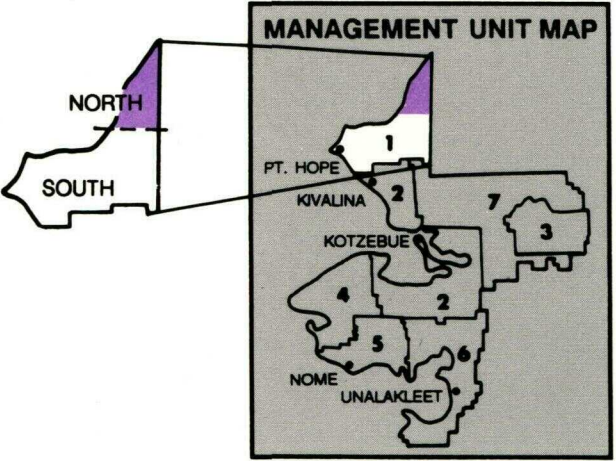


LEGEND

- Management Unit Boundary
- 1a Subunit Boundary
- No Pattern State Owned
- + + State Selected
- Native Owned
- Native Selected
- Native/State Selected
- Federal
- X Marine Mammal Haulouts
- Bird Rookeries
- ▲ Anadromous Stream Mouths or Enclosed Estuaries

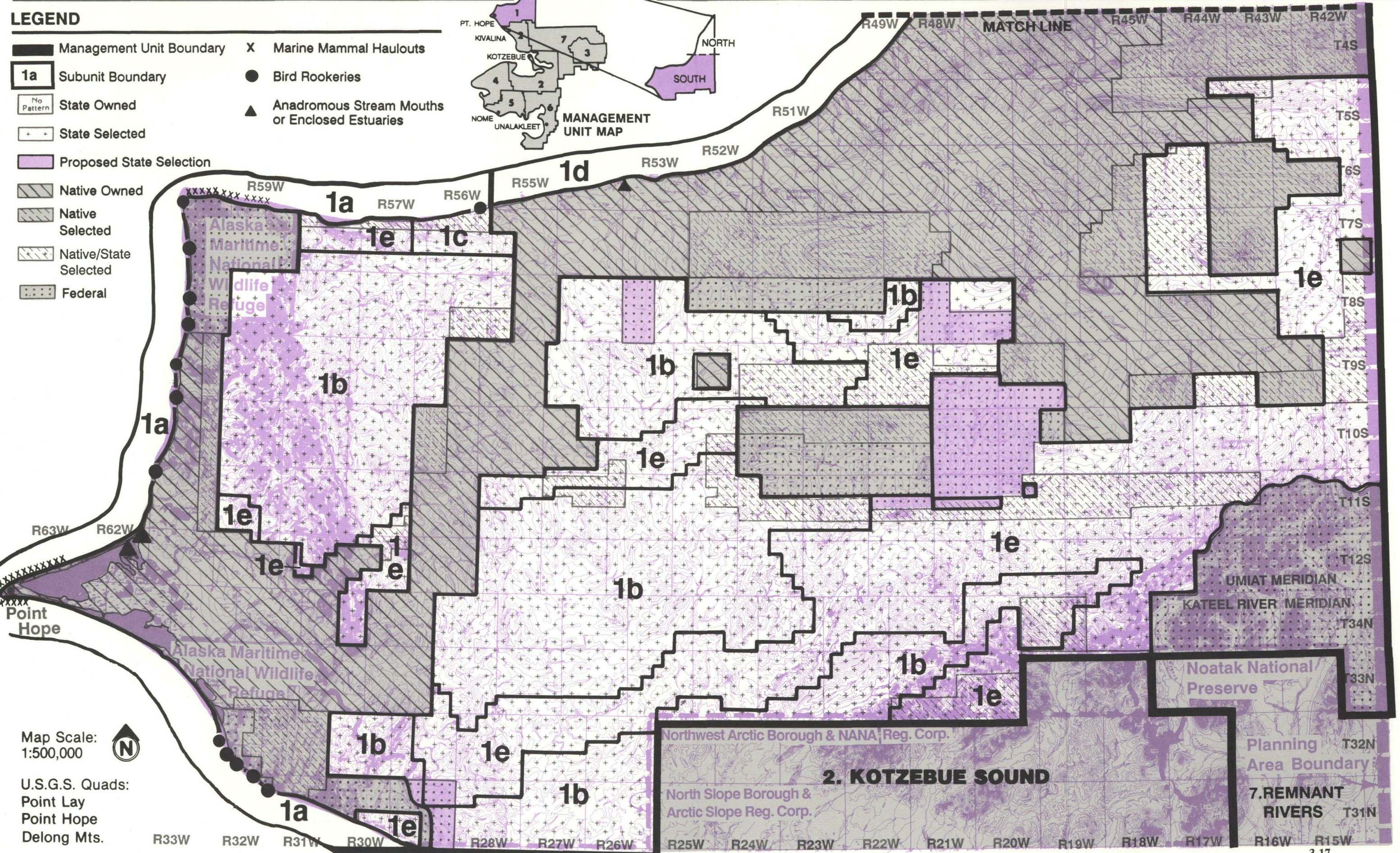
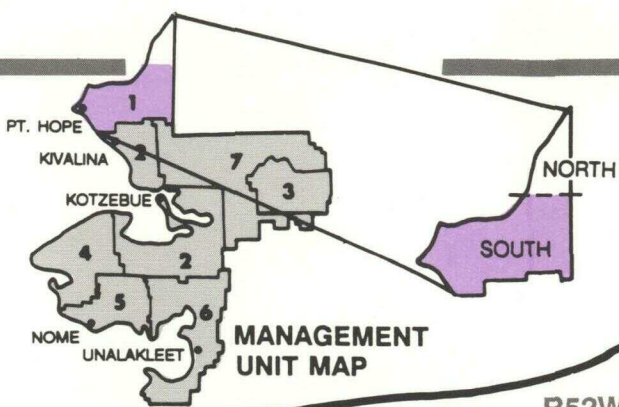
Map Scale:
1:500,000

U.S.G.S. Quads:
Wainwright
Point Lay



LEGEND

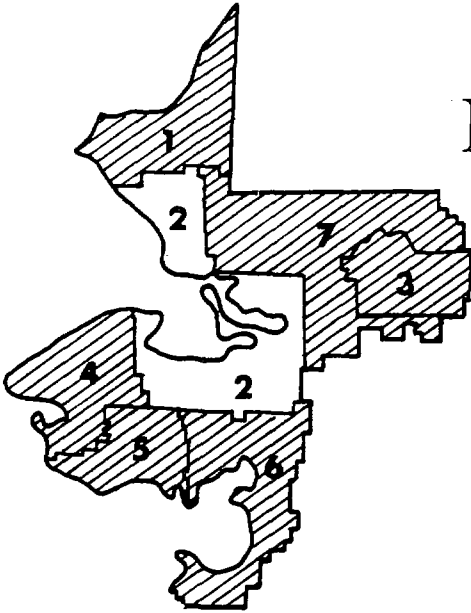
- Management Unit Boundary
- 1a Subunit Boundary
- No Pattern State Owned
- + + State Selected
- Proposed State Selection
- Native Owned
- Native Selected
- Native/State Selected
- Federal
- X Marine Mammal Haulouts
- Bird Rookeries
- ▲ Anadromous Stream Mouths or Enclosed Estuaries



Map Scale:
1:500,000

U.S.G.S. Quads:
Point Lay
Point Hope
Delong Mts.

Management Unit 2: KOTZEBUE SOUND



Background

Location and Land Ownership. This unit includes the drainages in the Northwest Arctic Borough that flow into Kotzebue Sound. State land in this region includes uplands in the Kugruk, Kiwalik, and West Fork Buckland River drainages south and east of Deering. The lands along the Wulik and Kivalina drainages, lands around but not including the Red Dog Mine site, and lands along the coast near Cape Seppings are a mixture of state-owned and state-selected lands, and overlapping state and Native selections. Overlapping state and Native selections also cover extensive areas near Deering and Buckland, around Eschscholtz Bay, on the south side of Selawik Lake, near Kivalina, and in the headwaters of the Wulik River. The state also owns all tidelands and submerged lands within three miles of the outer coast, and the shorelands under the more protected waters of Kotzebue Sound, Eschscholtz Bay, Hotham Inlet (Kobuk Lake), and Selawik Lake. The beds of the Kivalina, Wulik, Noatak, Kobuk, Selawik, Buckland, Inmachuk, Kiwalik, Kugruk, and Goodhope Rivers and other navigable waters are in state ownership.

Lands north and west of Selawik are primarily Native owned or Native selected, as are lands

adjacent to Deering and Buckland, and at Cape Espenberg. Several parcels of land within this unit are privately owned, such as Native allotments or patented mining claims. Federal lands include Cape Krusenstern National Monument in the north half of the unit, and large blocks in the Buckland and Goodhope drainages in the south. The unit also includes small corners of the Noatak National Preserve and Kobuk Valley National Park. Selawik National Wildlife Refuge also covers the central portion of the unit around Selawik Lake. The Kotzebue Sound unit falls entirely within the Northwest Arctic Borough, except for two mineralized townships at the north (Red Dog area) and the south (Granite Mountain area).

Resources and Land Uses. The communities of Kivalina, Noatak, Noorvik, Kiana, Selawik, Buckland, Deering, and Kotzebue (the regional hub) are within this unit. Hunting, fishing, egging, whaling, and trapping are some of the major uses of the state uplands and tidelands in this area. The residents also use the land for gathering eggs, berries, plants, and firewood. The lands and waters provide habitat for moose, caribou, waterfowl, and various marine mammals. Reindeer herding activity occurs in the Kiwalik, Kugruk, and Buckland areas. The area is also

used seasonally by guides and their clients, recreational users, and miners. The Noatak River is popular for recreational boating.

There is some bottomland spruce and poplar along the Noatak River. High fish and wildlife values are found along the major river systems and along the coast. Anadromous fish, Arctic char (particularly along the Wulik River), and sheefish are found in the rivers. Some of the rivers and lagoons are important overwintering areas for these fish. In the Wulik area, bowhead and gray whales, spotted, bearded and ringed seals, walrus, polar bears, capelin, and herring are found along the coast. Caribou, brown bear, ducks, geese, and moose are found in the interior. For state land areas in the unit, Dall sheep are found in the DeLong Mountains.

Within this unit there are many large areas with high or very high mineral potential. The most notable mineralized areas are the world-class lead-zinc-silver deposits of the Red Dog Mining District, the coal deposits of the Chicago Creek drainage, and the gold and platinum deposits of the upper Kiwalik and West Fork Buckland Rivers. With the exception of the coastal plain, mining claims are scattered throughout the area, with large claim blocks in the Red Dog District. The Chicago Creek area also has high potential as one of the most likely coal districts to develop in the planning area. A large portion of Kotzebue Sound and other coastal areas of this unit was included in the past state proposal for a Hope Basin oil and gas lease sale. This lease sale is not on the state's current five-year leasing schedule, but could be offered in the future.

Access. Kotzebue is the transportation hub for the area, with barge facilities and a regional airport. Small planes also provide access to outlying community airports, and other remote airstrips. Floatplanes provide access to the coast, the wetland areas west of Kelly River and east of Noatak, and the Red Dog mining district. The gravel road from the Red Dog mine to the Chukchi Sea now provides vehicular access to the interior part of this unit. The Deering-Inmachuk Road provides access into the Inmachuk mining area. The local and regional trail network extends along the major rivers, along the coast, and around the villages. Snowmachines are the main mode of local travel in the winter. There is boating along the coast and on many rivers, such as the Wulik,

Kivalina, Buckland, Inmachuk, Kiwalik, Kugruk, Kobuk, and Noatak.

Management Intent

General. State land in this unit will be kept in public ownership and managed for multiple use. Except for bird rookeries at Ninemile Point and the Choris Peninsula, state land in this unit will remain open to mineral entry. All state land in this unit will be available for leasing for coal or oil and gas. Shorelands in this unit will be managed consistent with the general management intent described on page 3-4.

Subunits. There are six subunits in the Kotzebue Sound management unit: 2a (habitat and harvest tidelands), 2b (general use uplands), 2c (mineral/habitat and harvest lands), 2d (mineral lands), 2e (general use tidelands), and 2f (habitat and harvest uplands). The general management intent for these subunits is described on pages 3-4 to 3-6.

The *Resource Information Summary* chart for this unit highlights important resource values found in each subunit. The summary is based on information from various resource reports prepared for the plan (see appendices C and D).

The *Land Use Designation Summary* chart for this unit provides a quick picture of planned uses for each subunit. For a complete description of management policy, the chart must be used with the statement of management intent and the management guidelines.

Coastal Plans. Nearly all the Kotzebue Sound unit is within the Northwest Arctic Borough Coastal Management Plan (CMP). Activities on state land will be managed consistent with the CMP policies. Important Resource Areas and Sensitive Use Areas recognized by the CMP as requiring special policies for development or for habitat protection are listed below and shown on maps in Appendix J. In addition, the Eschscholtz Bay and City of Kotzebue have been nominated as Areas Meriting Special Attention (AMSAs). When an AMSA plan is adopted for these areas, management will also be consistent with AMSA policies.

Important Resource Areas	Subunit
Cape Espenberg/Goodhope River	2a - habitat and harvest tidelands
Cape Krusenstern	2a - habitat and harvest tidelands
Lower Buckland River	2f - habitat and harvest uplands
Kobuk River Delta	2a - habitat and harvest tidelands
Kobuk/Selawik Lakes	2a - habitat and harvest tidelands,
North Kivalina Coast	2a - habitat and harvest tidelands, and 2f - habitat and harvest uplands
Red Dog Mine Transportation Corridor	2b - general use uplands, and 2f - habitat and harvest uplands
Selawik River Delta	2a - habitat and harvest tidelands
Sisoalik Spit* Subunit	2a - habitat and harvest tidelands
Sensitive Use Areas	Subunit
Elephant Point/Choris Peninsula	2a - habitat and harvest tidelands, and 2f - habitat and harvest uplands
Eschscholtz Bay	2a - habitat and harvest tidelands
Inmachuk River	2b - general use uplands, 2c - mineral/habitat and harvest lands, 2d - minerals lands, and 2f - habitat and harvest uplands
Noatak River Chum Salmon Spawning Area	2f - habitat and harvest uplands
Upper Kivalina River	2f - habitat and harvest uplands
Wulik River Char Overwintering and Spawning Area	2b - general use uplands, and 2f - habitat and harvest uplands

*Sisoalik is the regionally recognized spelling for the area noted as "Sheshalik" on the USGS quadrangle, Kotzebue.

Management Guidelines

Bird Rookeries and Subsurface Resources (Subunits 2a, 2e, and 2f). The Choris Peninsula hosts thousands of glaucous gulls, horned puffins, black-legged kittiwakes, pigeon guillemots, black guillemots, tufted puffins, and pelagic cormorants. Most seabirds arrive at the colonies in late May or early June and remain until the young have fledged, generally by the middle of September, before departing for the winter.

Most state land in these subunits will remain open to new mineral entry. However, state uplands within one-quarter mile of two seabird colonies--Ninemile Point and the Choris Peninsula (Subunit 2f)--will be closed to new mineral entry to protect this important habitat. These colonies are shown on the *Subsurface Designation Summary Map*, page 2-51, and are described in detail in Appendix H, *Mineral Orders for the Northwest Area Plan*. For other guidelines that apply to bird rookeries on state land in these subunits, see Chapter 2, *Fish and Wildlife Habitat Guideline K*, page 2-8.

Commercial Recreation (Subunits 2a, 2b, 2c, 2e, and 2f). *Public and Commercial Recreation Guideline D*, page 2-23, describes state management for commercial recreation. For these subunits, this guideline prohibits commercial recreation leasing in the following areas: 54 anadromous stream mouths or enclosed estuaries, 6 marine mammal haulouts, and 18 seabird rookeries, as shown on the management unit map.

Mouths of Anadromous Streams or Enclosed Estuaries (Subunits 2a and 2e). *Fish and Wildlife Habitat Guideline J*, page 2-8, describes state management for mouths of anadromous streams and narrow openings of enclosed estuaries such as lagoons, inlets, or basins. These areas are shown on the management unit map. For many of these stream mouths and estuaries, the location of the opening is dynamic, and the guideline will apply to their location at the time of a proposed action. Within these subunits, this guideline applies to the following areas:

Anadromous Streams

Buckland River
Ekichuk Lake (one unnamed stream)
Inmachuk River
Jade Creek
Kivalina River (two mouths)
Kivalik River
Kobuk River delta (16 mouths)
Kugruk River
Newheart Creek
Noatak River (three mouths)
Omikviorok River
Rabbit Creek
Selawik River
Four unnamed streams near Attiunik Point
Three unnamed streams north of Mukuksok Point
Two unnamed streams west of Sheshalik Spit
Unnamed creek at Tasaychek Lagoon
Unnamed creek on north shore of Hotham Inlet
Wulik River

Enclosed Estuaries

Imikruk Lagoon
Ipiavik Lagoon
Kivalina Inlet
Kivalik Lagoon
Kotlik Lagoon
Krusenstern Lagoon
Kugruk Lagoon
Selawik Lake
Sheshalik Spit
Singauk Entrance
Tasaychek Lagoon

Selections (Subunit 2f). The state should topfile on two Native selections to provide access and to consolidate ownership if the land is not conveyed to the Native corporations. One parcel is near the coast, south of Kivalina. The other parcel is along the Buckland River, southeast of Buckland.

General. The complete set of areawide guidelines is presented in Chapter 2. The *Resource Information Summary* charts for this unit identify important trails, known or probable heritage sites, and other resource values in specific subunits that are addressed by the appropriate guidelines in Chapter 2. Any Chapter 2 guidelines could apply to certain uses within this management unit. Those most likely to apply are

- Coordination and public notice
- Fish and wildlife habitat
- Grazing
- Heritage resources
- Public and commercial recreation
- Subsistence activities and traditional uses
- Subsurface resources
- Trail Management

RESOURCE INFORMATION SUMMARY

Management Unit 2: Kotzebue Sound - Page 1 of 3

RESOURCE		SUBUNIT
	2a	2b
Fire Protection	N/A	Mostly modified; limited north of Goodhope R. and west of Noatak R.; full along Noatak R. and Baldwin Peninsula.
Fish and Wildlife	A1: 18 seabird rookeries, including two at Chamisso Island and four at Choris Peninsula; 37 anadromous stream mouths (16 at Kobuk River Delta plus 21 others in the subunit). A2/B1: belukha, bowhead, walrus, bearded seal, spotted seal, herring and capelin, ducks and geese (spring, nesting, fall); ringed seal (breeding and pupping Kiwalik Lagoon); moose, brown bear, caribou (Kugruk River and east), polar bear.	B2: moose, caribou (east of Kugruk-Koyuk River valleys); brown bear; overwintering Arctic char.
Forestry	Driftwood	Low to none except spruce and/or hardwoods along upper reaches of Kugruk, Koyuk, and Kiwalik Rivers.
Heritage Resources	Known cultural values along coast, especially at Cape Espenberg, Kotzebue, Deering, Selawik Lake; very high potential for sites all along coast.	Some known cultural sites on upper Wulik River; very high potential along Kobuk and Selawik Lake shores.
Important Trails	Boat and winter trail along coast; coastal trail along southwest shore of Kobuk Lake; Kotzebue - Noorvik (and points east); Kotzebue - Noatak (and points north); E-W across Selawik Lake; trails up the Squirrel River and Kobuk River; Buckland to Kotzebue Trail; Deering to Kotzebue Trail.	Red Dog Mine road; Kotzebue to Buckland/Deering inland trail and Kobuk Lake trail; Noorvik to Kiwalik; Elephant Point winter trail; Baldwin Peninsula (Callahan's cabin) over Eschscholtz Bay to Choris Peninsula; Callahan's cabin to west coast of Baldwin Peninsula; trails connecting Deering, Buckland, Candle, Granite Mtn., White Mtn., Koyuk.
Minerals	Low to very low	Mostly low and moderate, some high potential; some very high potential near Hunter Creek. Numerous mining claims in Kugruk, Koyuk, Kiwalik, and West Fork Buckland drainages, and within the Red Dog Extension area.
Oil & Gas	Low potential; part of past proposed Hope Basin lease sale.	Low potential; part of past proposed Hope Basin lease sale.
Public Access	Boat routes or winter trails, local and regional trails; Sadie Creek Road along coast into Kotzebue; remote airstrips and floatplane landing areas along Kobuk River and Selawik Lake shoreline; wheelplane landings along coast; community airstrips at Kivalina.	Boat routes or winter trails, local and regional trails; Red Dog mine road; remote airstrip on south side of Baldwin Peninsula.
Recreation	Existing at Kobuk River Delta and upriver; at Choris Peninsula and Attiunik Pt., along Noatak River and coastline west of Sheshalik; scenic views, beachcombing, picnicking, camping, boating, berry picking on Goodhope River.	Unknown
Reindeer Grazing	N/A	Large areas of winter range south of Buckland-Deering.
Settlement Suitability	N/A	Moderate suitability along trails and coastline of Kobuk Lake; some low potential along major rivers and along trails east and south of Candle and north and west of Chicago Creek; remainder unsuitable.
Subsistence	Subsistence use in this unit has been documented by studies of the DF&G, Subsistence Division, for the communities of Ambler, Buckland, Deering, Kiana, Kobuk, Kivalina, Noatak, Noorvik, Selawik, and Shungnak. Subsistence use by other communities—such as Kotzebue—is known to exist, but the extent of their use has not been documented in studies for the NWAP.	

See Appendix C for a list of reports with more detailed information, and Appendix D for definition of ratings.

RESOURCE INFORMATION SUMMARY

Management Unit 2: Kotzebue Sound - Page 2 of 3

RESOURCE	SUBUNIT	
	2c	2d
Fire Protection	Red Dog district limited; remainder modified.	Modified
Fish and Wildlife	A1: one anadromous stream mouth (Kiwalik R.); A2/B1: caribou migration and winter range; ducks, geese (spring, nesting, fall); moose, brown bear, anadromous fish.	B2: moose, brown bear, caribou (east of Kugruk-Koyuk River valleys).
Forestry	Low to none except spruce or hardwoods along Quartz Creek.	None to low.
Heritage Resources	Known cultural sites along upper Wulik and Kivalina Rivers and their tributaries; historic mining activity at Chicago Creek.	Unknown
Important Trails	Upper Wulik River; along Candle to Kougarak; along Deering-Kougarak; Candle to Kotzebue; Candle to Deering; Candle to Buckland; Candle to Koyuk; Deering-White Mountain trail; Granite Mountain-Deering (two routes).	Trails from Granite Mountain area to Deering, Buckland, Koyuk; Granite Mountain trail between two airstrips; road near Candle; Candle to Kougarak trail.
Minerals	Very high to high potential; zinc-lead-silver within Red Dog District; gold along Kiwalik and Kugruk Rivers and near Granite Mtn; known coal deposits at Chicago Creek; numerous mining claims.	Very high potential; gold on Inmachuk and Kugruk Rivers; placer and platinum near Granite Mountain; many mining claims.
Oil & Gas	Unknown	Unknown
Public Access	Remote landing sites at Red Dog and Lik, Candle, Kugruk R., Bear Creek, Bob Creek and Hannum Creek; floatplanes on lakes and rivers; wheelplanes on beaches; boats along coast; intervillage, regional and local trails.	Unimproved road near Candle; Inmachuk mining area connecting trails; Quartz Creek and Granite Mountain airstrips and two other remote strips; local and regional trails.
Recreation	Existing along Quartz Creek (camping), potential along lower Kiwalik River.	Potential near Granite Mountain hot springs.
Reindeer Grazing	Some areas north of Granite Mountain with winter range.	Large areas north of Granite Mountain with winter range.
Settlement Suitability	Mostly low to unsuitable; some moderate potential along upper Wulik River and adjacent to landing areas.	Mostly unsuitable, some low potential.
Subsistence	Subsistence use in this unit has been documented by studies of the DF&G, Subsistence Division, for the communities of Ambler, Buckland, Deering, Kiana, Kobuk, Kivalina, Noatak, Noorvik, Selawik, and Shungnak. Subsistence use by other communities—such as Kotzebue—is known to exist, but the extent of their use has not been documented in studies for the NWAP.	

See Appendix C for a list of reports with more detailed information, and Appendix D for definition of ratings.

RESOURCE INFORMATION SUMMARY

Management Unit 2: Kotzebue Sound - Page 3 of 3

RESOURCE		SUBUNIT
2e		2f
Fire Protection	N/A	Modified
Fish and Wildlife	A1: two anadromous stream mouths; A2: belukha, herring and capelin, ducks and geese (spring, nesting, fall); moose, brown bear, caribou (Kugruk River and east).	A1: seabird colonies at Ninemile Pt. and Choris Peninsula; A2/B1: belukha, anadromous fish; moose winter range; ducks and geese, Dall sheep; overwintering Arctic char; caribou (some winter range in east portions), brown bear. Areas upgraded due to human use; Buckland and Inmachuk River drainages.
Forestry	Driftwood	Low to none except some along upper Buckland River.
Heritage Resources	High probability of cultural sites along coast.	Known cultural sites along Wulik River and its tributaries and Kivalina River, high probability of cultural sites along coast and lakeshores.
Important Trails	Boat and winter trails along coast; coastal winter trail, Kotzebue to Sheshalik and north; local trails to Kobuk Lake; Deering to Kotzebue trail.	Kotzebue to Buckland-Deering inland trail; coastal trail 5 miles north and south of Cape Blossom; trails north of Buckland; Candle connecting trails; Buckland River, Kiwalik River, Deering-White Mountain trails; Red Dog Mine road; Kivalina River trail; Noatak to Kivalina trail; Wulik River trail; Asikpak River trail; boat and winter trails along coast; Noatak River trail.
Minerals	Low or unknown.	Known coal potential on upper Kiwalik at Wilson Creek; moderate to high, some low, some very high in Red Dog extension areas; numerous mining claims.
Oil & Gas	Low potential; part of past proposed Hope Basin lease sale.	Low potential; part of subunit in past proposed Hope Basin lease sale. Boat routes or winter trails, local and regional; Sadie Creek Road along coast into Kotzebue; floatplane or wheelplane along coast in many places.
Public Access	Boat routes or winter trails, local and regional; Sadie Creek Road along coast into Kotzebue; floatplane or wheelplane along coast in many places.	Boat routes or winter trails, local and regional; Sadie Creek Road along coast into Kotzebue; remote airstrips at Arctic, south of Cape Blossom, Kiwalik R., and south of Hunter Lake; several wheelplane landing sites along Wulik and Kivalina Rivers, and Wrench Creek; Red Dog Mine Road; Deering-Inmachuk Road.
Recreation	Unknown	High value along Wulik R. and Noatak R.; existing along Kivalina and West Fork Buckland rivers, and Hunter Lake (camping); potential along Buckland River.
Reindeer Grazing	N/A	Large areas of winter range along Kiwalik and Buckland River drainages.
Settlement Suitability	N/A	Some moderate along major rivers, Kobuk lakeshore and Chicago Creek; remainder mostly low; some unsuitable potential.
Subsistence	Subsistence use in this unit has been documented by studies of the DF&G, Subsistence Division, for the communities of Ambler, Buckland, Deering, Kiana, Kobuk, Kivalina, Noatak, Noorvik, Selawik, and Shungnak. Subsistence use by other communities--such as Kotzebue--is known to exist, but the extent of their use has not been documented in studies for the NWAP.	

See Appendix C for a list of reports with more detailed information, and Appendix D for definition of ratings.

LAND-USE DESIGNATION SUMMARY

MANAGEMENT UNIT 2 - KOTZEBUE

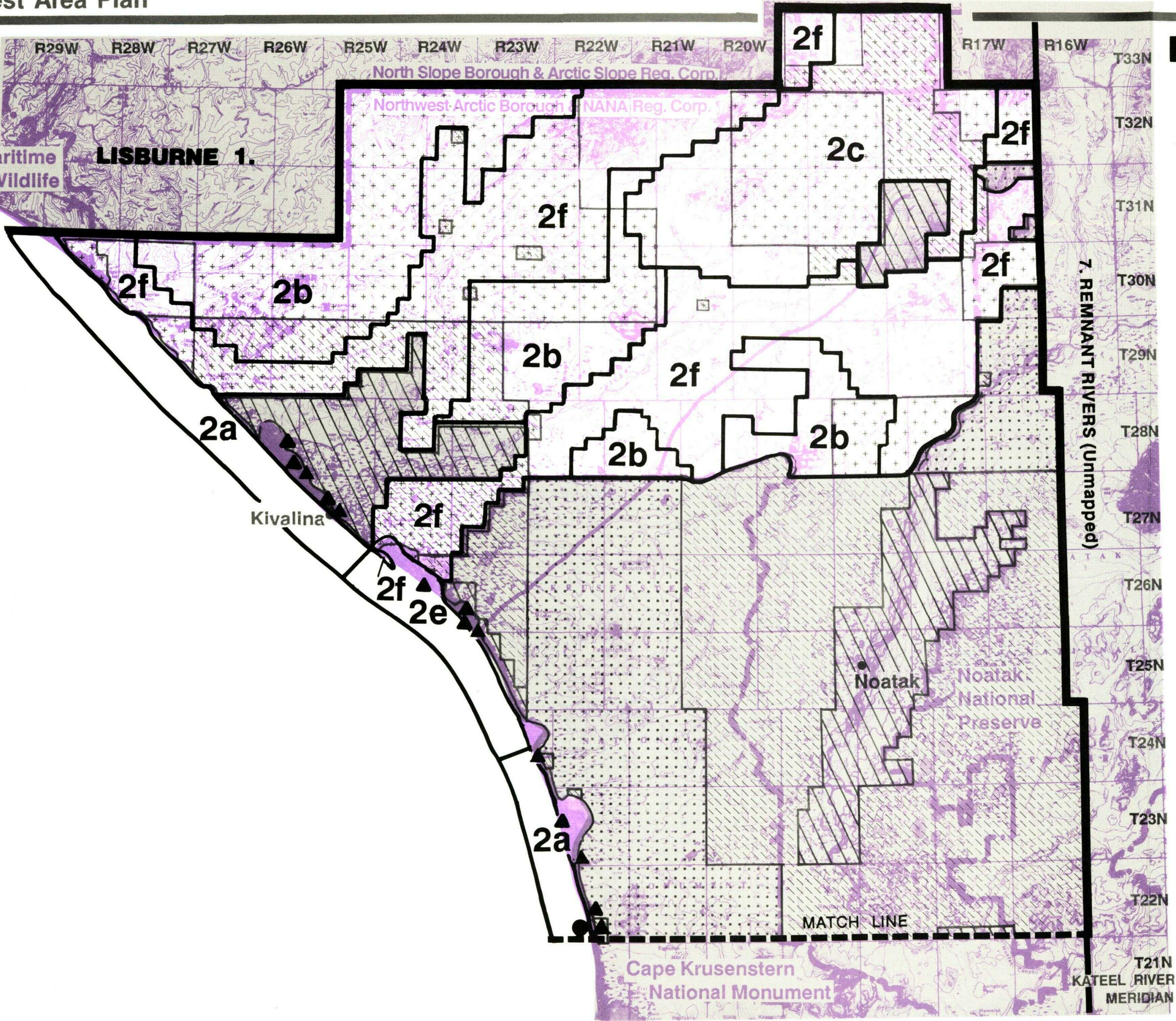
SUBUNIT	LAND USE DESIGNATIONS			COMMENTS
	PRIMARY SURFACE USE ¹	PROHIBITED SURFACE USE ²	SUBSURFACE ³	
2a	Habitat & harvest tidelands	Remote cabins Commercial rec. leases in some areas	Open	
2b	General use uplands	Land disposals Remote cabins Commercial rec. leases in some areas	Open	
2c	Minerals/ Habitat & harvest lands	Land disposals Remote cabins Commercial rec. leases in some areas	Open	Chicago Creek (along the Kugruk River) is also designated coal.
2d	Mineral lands	Land disposals Remote cabins	Open	
2e	General use tidelands	Remote cabins Commercial rec. leases in some areas	Open	
2f	Habitat & harvest uplands	Land disposals Remote cabins Commercial rec. leases in some areas	Open, except within 1/4 mile of 2 seabird rookeries	2 small parcels proposed for state selection

¹Secondary uses include: grazing--on the Seward Peninsula, west of the West Fork Buckland River--in subunits 2b, 2c, 2d, and 2f; recreation in subunits 2a, 2c, and 2f; and forestry in subunits 2b, 2c, and 2f. For more details, see Resource Information Summary for this unit, and Appendix D.

²Other uses such as material sales, land leases, or permits that are not specifically prohibited may be allowed. Such uses will be allowed if consistent with the management intent statement, the management guidelines of this unit, and the relevant management guidelines listed in Chapter 2.

³All areas are available for leasing for leasable minerals. Statements of whether or not the unit is open to mineral entry refer only to locatable minerals. See glossary in Appendix A for definitions of leasable and locatable minerals. See Appendix H for detailed descriptions of areas closed to mineral entry.

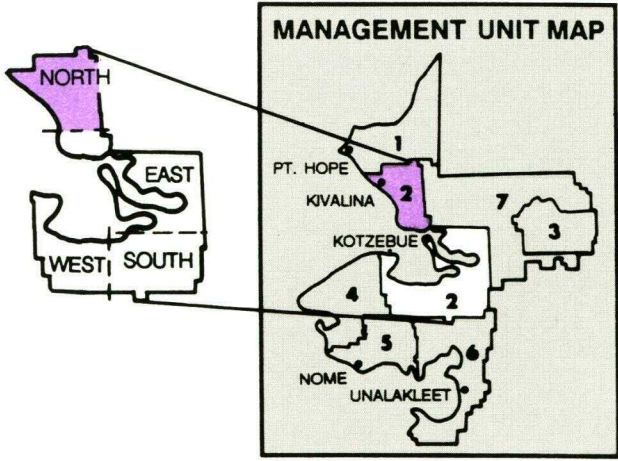
Alaska Maritime
National Wildlife
Refuge



KOTZEBUE SOUND

LEGEND

- Management Unit Boundary
- 2a Subunit Boundary
- No Pattern State Owned
- + + State Selected
- Proposed State Selection
- Native Owned
- Native Selected
- Native/State Selected
- Federal
- X Marine Mammal Haulouts
- Bird Rookeries
- ▲ Anadromous Stream Mouths or Enclosed Estuaries



Map Scale:
1:500,000

U.S.G.S. Quads:
Delong Mts.
Noatak



KOTZEBUE SOUND

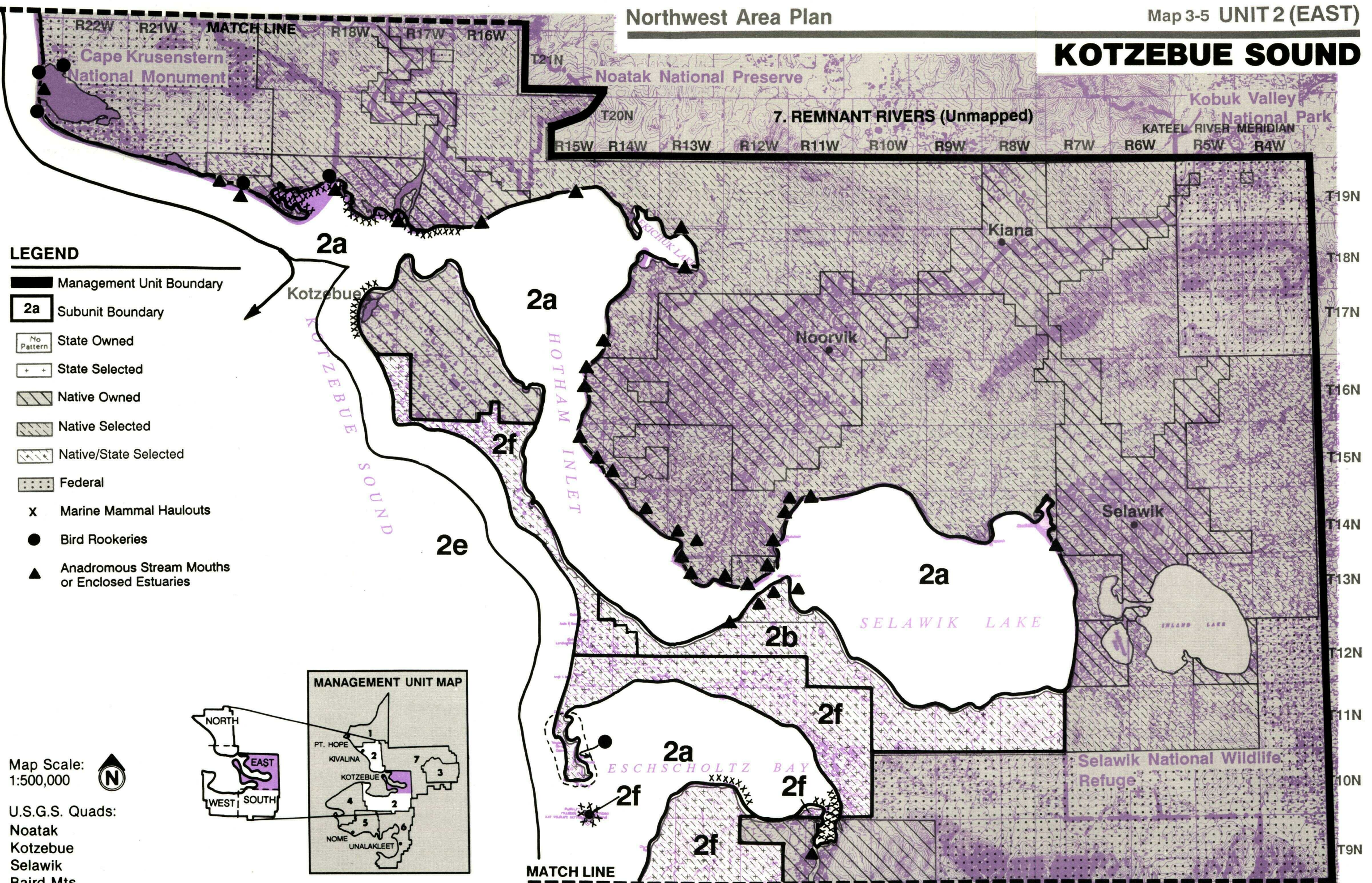
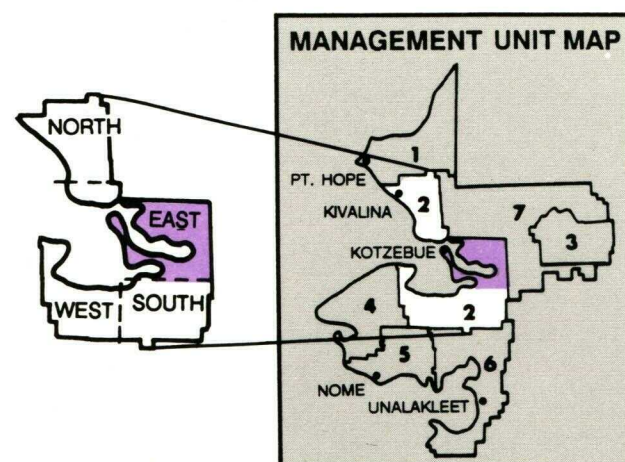
LEGEND

- Management Unit Boundary
- 2a Subunit Boundary
- State Owned
- State Selected
- Native Owned
- Native Selected
- Native/State Selected
- Federal
- x Marine Mammal Haulouts
- Bird Rookeries
- ▲ Anadromous Stream Mouths or Enclosed Estuaries

Map Scale:
1:500,000

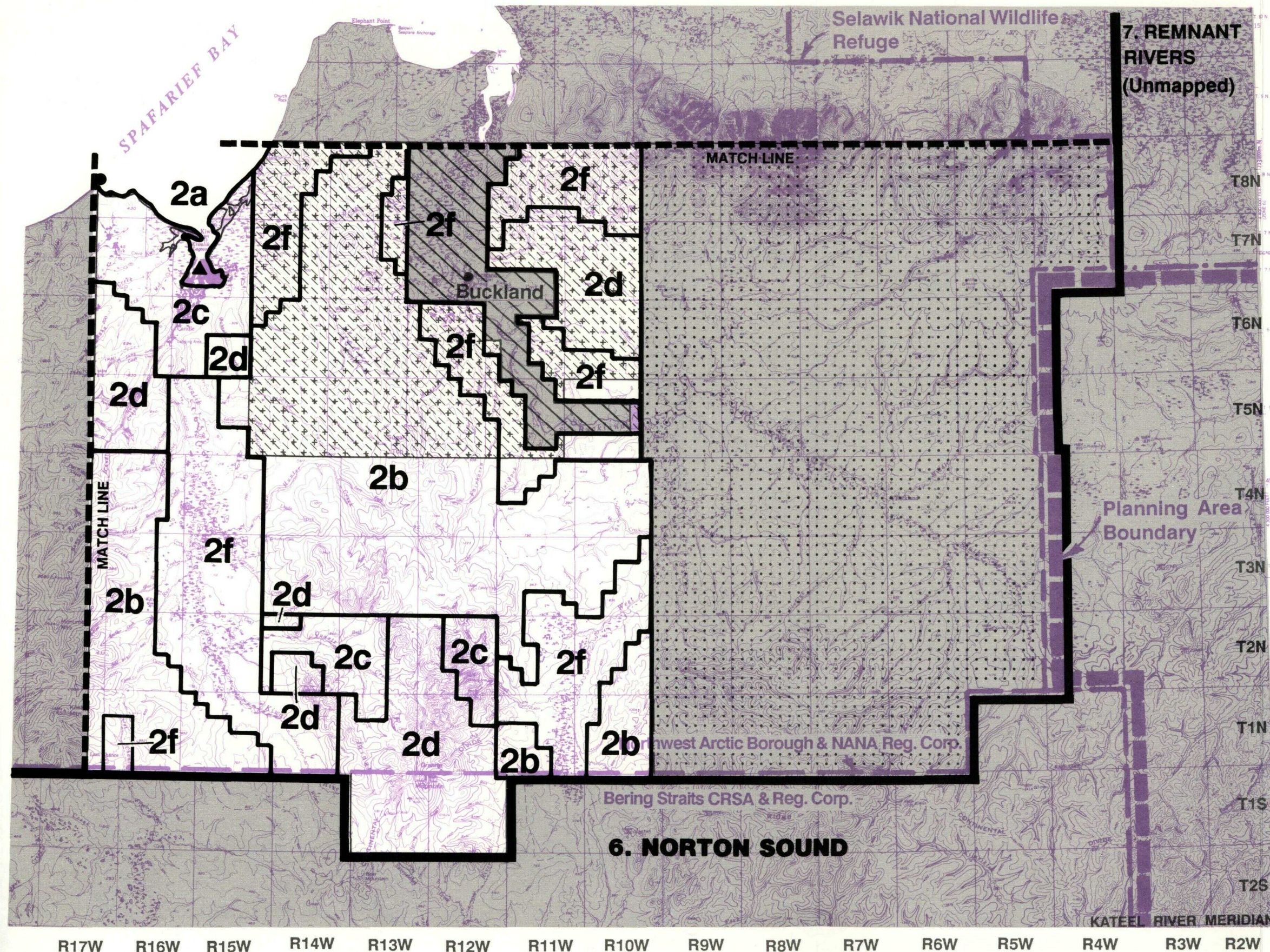


U.S.G.S. Quads:
Noatak
Kotzebue
Selawik
Baird Mts.



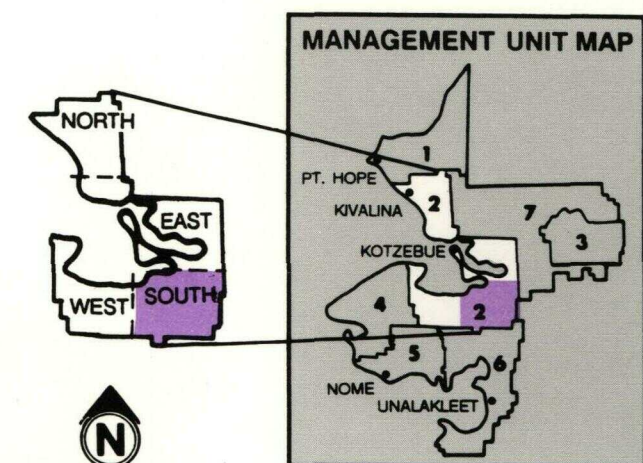
Northwest Area Plan

KOTZEBUE SOUND



LEGEND

- 2a Management Unit Boundary
- 2a Subunit Boundary
- No Pattern State Owned
- + State Selected
- / Native Owned
- / Native Selected
- / Native/State Selected
- / Proposed State Selections
- / Federal
- X Marine Mammal Haulouts
- Bird Rookeries
- ▲ Anadromous Stream Mouths or Enclosed Estuaries



Map Scale:
1:500,000

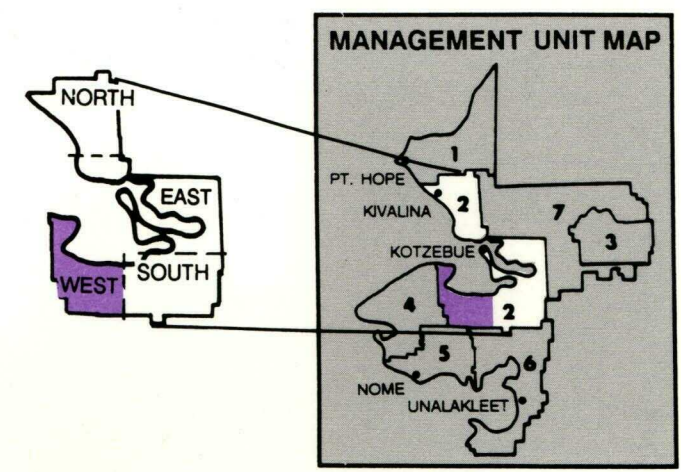
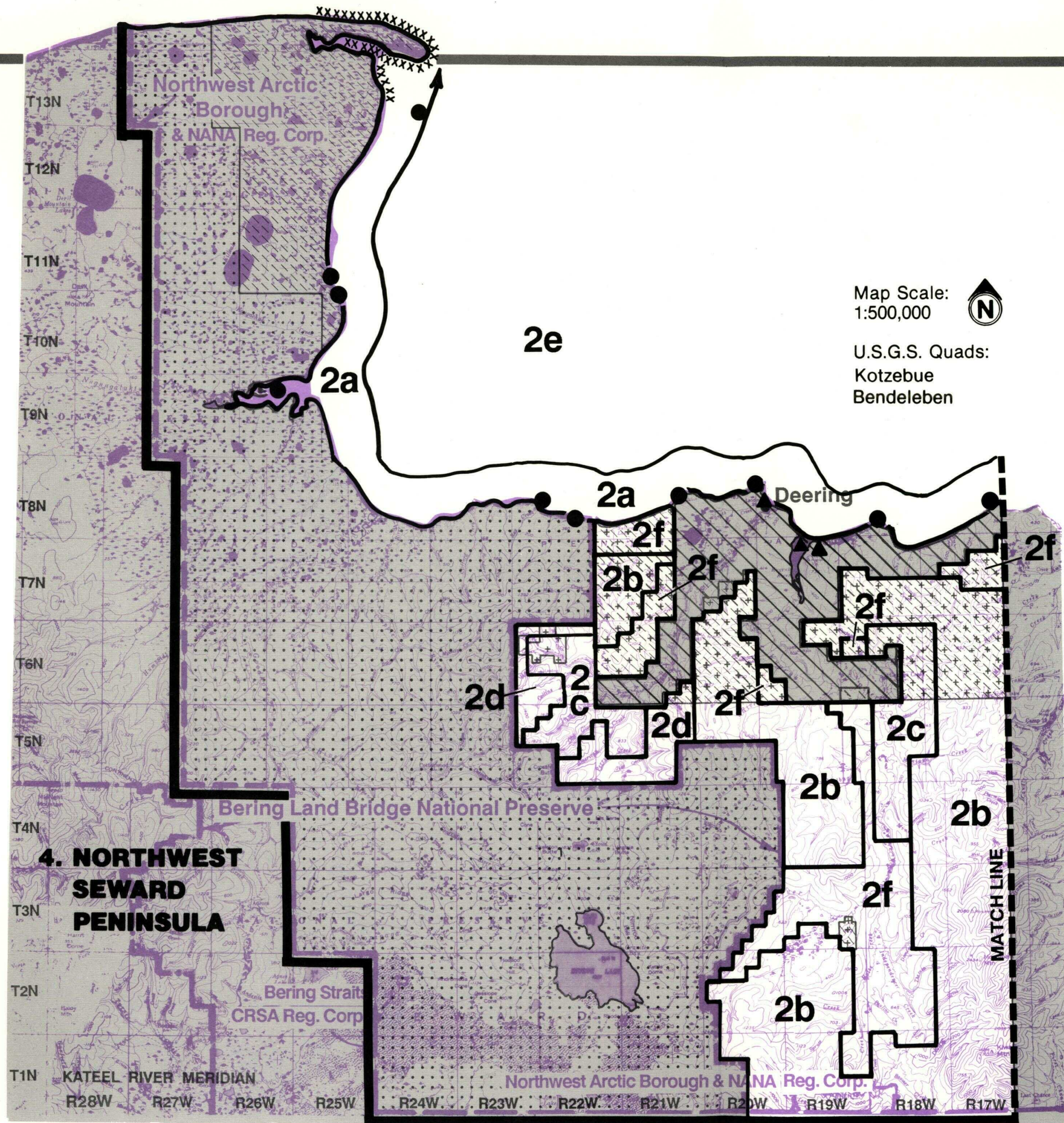
U.S.G.S. Quads:
Selawik
Candle

KOTZEBUE SOUND

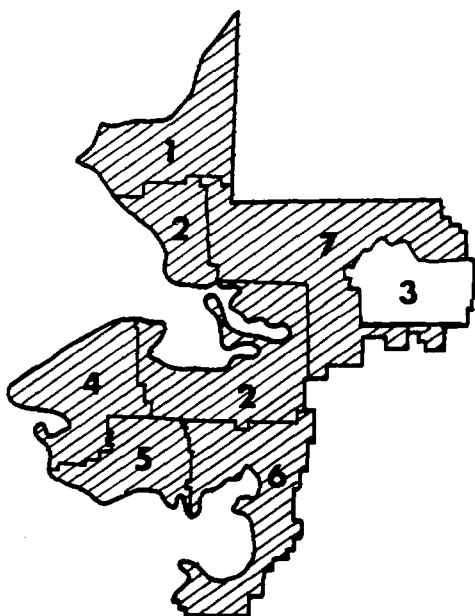
Northwest Area Plan

LEGEND

- Management Unit Boundary
- Subunit Boundary
- State Owned
- State Selected
- Native Owned
- Native Selected
- Native/State Selected
- Federal
- Marine Mammal Haulouts
- Bird Rookeries
- Anadromous Stream Mouths or Enclosed Estuaries



Management Unit 3: KOBUK



Background

Location and Land Ownership. The Kobuk Unit consists of lands in the upper Kobuk basin. Major drainages are the Kobuk, Ambler, Redstone, Shungnak, Kogoluktuk, Mauneluk, Pah, and Reed rivers. The unit is surrounded by four National Conservation System Units: Gates of the Arctic National Park and Preserve, Noatak National Preserve, Kobuk Valley National Park, and Selawik National Wildlife Refuge. Most of the unit is alpine tundra on the rugged mountains of the western Brooks Range. Spruce and hardwood forests are found along much of the Kobuk River and its major tributaries, with wet tundra behind the riparian forests.

About half the unit is state-owned land. There are also several blocks of state-selected lands, and extensive areas of overlapping state and Native selections. The lower stretches of the Kobuk drainage are in Native corporation ownership. Several parcels of private land exist within this unit, such as Native allotments or patented mining claims. The eastern part of the unit is federal land within the Gates of the Arctic National Park and Preserve. The Kobuk Unit is entirely within the Northwest Arctic Borough.

Resources and Land Use. Ambler, Shungnak, and Kobuk are communities within this unit. Hunting, trapping, fishing, public recreation, and mining are the major uses of the state land in this unit. Habitat in this area provides moose winter range, caribou winter range and migration routes, and fall habitat and migration routes for waterfowl. It also supports populations of anadromous and resident fish, brown bear, and in the mountains, Dall sheep. Public recreation, including camping, floating, power-boating, hiking, and winter sports, is concentrated along the Kobuk River and several of its tributaries, with more dispersed recreation in the mountains of the Brooks Range. Mining began in the Kobuk region in the late 1800s, before the gold rush to Nome. A large schist belt extending across the unit contains large reserves of copper, lead, zinc, cadmium, silver, and gold. The Ambler-Bornite mineral district has received heavy exploration effort in the past.

Access. The Kobuk region is accessible by boat along the Ambler, Kobuk, Mauneluk, and lower Pah rivers. Wheeled planes can land at community airports and mining areas, and on gravel bars along the Ambler, Kobuk, and Mauneluk rivers. Floatplanes provide access to this unit at Minakokosa, Nutuvukti, Selby, Narvak,

Norutak, Kollioksak, Anirak and Avaraart lakes, and on the Kobuk River and its major tributaries. Many trails cross this unit, including these major trails: Alatna River to Shungnak to Kotzebue; Ambler to Kotzebue, Anaktuvuk Pass, and the Redstone River; Redstone River to Cutler River; Kobuk River to Shungnak; and along the Shungnak River.

Management Intent

General. Most of the state land in this unit will be kept in public ownership and managed for multiple use. Opportunities for private use of state land will be offered through two land disposals. Nearly all state land that remains in public ownership will be kept open to new mineral entry and will remain available for leasing for coal or oil and gas. New mineral entry will not be allowed in the sheefish spawning areas along the Kobuk River. Land sale areas will be closed to mineral entry prior to disposal of the land. Shorelands will be managed consistent with the general management intent described on page 3-4.

Subunits. There are seven subunits within the Kobuk management unit: 3a (general use

uplands), 3b (mineral/habitat and harvest lands), 3c (mineral lands), 3d (habitat and harvest/recreation lands), 3e (settlement), 3f (settlement), and 3g (habitat and harvest uplands). The general management intent for these subunits is described on pages 3-4 to 3-6.

The *Resource Information Summary* chart for this unit highlights important resource values found in each subunit. The summary is based on information from various resource reports prepared for the plan (see appendices C and D).

The *Land Use Designation Summary* chart for this unit provides a quick picture of planned uses for each subunit. For a complete description of management policy, the chart must be used with the statement of management intent and the management guidelines.

Coastal Plans. Most lands in this unit are within the Northwest Arctic Borough Coastal Management Plan (CMP) boundaries. Activities on state land within this unit will be managed consistent with CMP policies. The CMP identifies three areas that have special policies for development or for habitat protection within the Kobuk Unit (see maps in Appendix J):

Important Resource Areas

Maniilaq* River/Ambler Lowlands

Selawik/Hunt/Redstone Rivers
Caribou Migration Corridor

Subunit

3a - general use uplands,
3b - minerals/habitat and harvest lands,
3f - settlement, and
3g - habitat and harvest uplands

3g - habitat and harvest uplands

Sensitive Use Areas

Kobuk River Sheefish/Whitefish
Spawning and Use Area

Subunit

3d - habitat and harvest/recreation lands

*"Maniilaq" is the regionally recognized spelling for the area noted as "Mauneluk" on the USGS quadrangle, Shungnak.

Additionally, the Ambler/Bornite Area Meriting Special Attention (AMSA) is nominated in the Northwest Arctic Borough Coastal Management Program within the Kobuk Management Unit. When an AMSA is adopted for this area, management for state land will be consistent with AMSA policies. The AMSA identified includes portions of subunits 3a, 3b, 3e, and 3g.

Management Guidelines

Commercial Recreation (Subunit 3d). *Public and Commercial Recreation* Guideline D, on page 2-23, describes state management for commercial recreation. For this subunit, this guideline prohibits commercial recreational leasing in seven sheefish spawning areas, as shown on the management unit map.

Land Disposal (Subunit 3e and 3f). Two settlement areas are designated in the Kobuk Management Unit: Kollioksak Lake (3e) will be available for a net disposal of approximately 100-200 acres of land, and Mauneluk River (3f) will be available for a net disposal of approximately 75-150 acres of land. Net acreage is the amount of land actually sold from a land offering. Gross acreage is the overall amount of land within a land offering project. For Kollioksak Lake, the gross acreage is 2,480 acres; for Mauneluk River, it is 5,320 acres.

These two settlement areas are available for selection by the Northwest Arctic Borough under the municipal entitlement program. The lands in the borough are subject to the platting, subdividing, and zoning laws of the Northwest Arctic Borough.

These two land disposals will be deferred for five years after adoption of this area plan or until the Northwest Arctic Borough completes its comprehensive plan, whichever comes first. Special management guidelines apply to settlement areas. In particular, refer to the guidelines for *Lakeshore Management* (page 2-15) for the Kollioksak Lake disposal, and *Stream Corridors and Instream Flow* (page 2-39) for the Mauneluk River disposal.

Selections (Subunits 3a, 3b and 3g). The state should topfile on two Native selections east of Ambler (in five townships) to consolidate ownership if the land is not conveyed to the Native corporation. These proposed selections have high mineral, habitat, and human use values.

Sheefish Spawning Areas (Subunit 3d). The seven sheefish spawning areas identified on the management unit map are the only known and documented spawning sites for sheefish in the Kobuk River basin. Fish from these sites are important for subsistence and sport fisheries in the Kobuk River basin. For these seven sites, the bed of the Kobuk River and adjacent state land within 200 feet either side of the ordinary high water mark of the river will be closed to new mineral entry to protect sheefish production. These areas are shown on the *Subsurface Designation Summary Map*, page 2-51, and in detail in Appendix H, *Mineral Orders for the Northwest Area Plan*.

General. The complete set of areawide guidelines is presented in Chapter 2. The *Resource Information Summary* charts for this unit identify important trails, known or probable heritage sites, and other resource values in specific subunits that are addressed by the appropriate guidelines in Chapter 2. Any Chapter 2 guidelines could apply to certain uses within this management unit. Those most likely to apply are:

- Coordination and public notice
- Fish and wildlife habitat
- Forestry
- Heritage resources
- Lakeshore management
- Public access
- Public and commercial recreation
- Remote cabins and trapping cabins
- Settlement
- Stream corridors and instream flow
- Subsurface resources
- Trail management

RESOURCE INFORMATION SUMMARY

Management Unit 3: Kobuk - Page 1 of 2

RESOURCE	SUBUNIT			
	3a	3b	3c	3d
Fire Protection	Modified	Modified	Modified	Modified
Fish and Wildlife	Mostly B2 (moose, brown bear, caribou). Some C in high areas.	Mostly A2/B1 for moose (winter range), ducks, geese, caribou (migration), resident fish, Dall sheep (headwaters), brown bear; some B2.	Mostly B2 (moose, brown bear, caribou). Some C in high areas.	A1 in sheefish spawning areas; rest A2/B1: winter moose range, caribou winter range and migration, anadromous and resident fish, ducks & geese (fall and migration), brown bear.
Forestry	Spruce and hardwoods in patches along major streams.	Spruce and hardwoods in patches along major streams.	Spruce and hardwoods in patches along major streams.	Spruce and hardwoods in patches along major streams.
Heritage Resources	Unknown	Known sites on upper Shungnak and at Avaraart Lake.	Unknown	Known sites along Kobuk R.
Important Trails	None identified.	Ambler to Anaktuvuk Pass trail; Shungnak River trail; Mauneluk river trail.	None identified.	Alatna - Shungnak - Kotzebue trail.
Minerals	Mixed: low to very high; very low at Bismark Mt.; numerous mining claims.	High to very high. Major mining district with world class deposits and reserves.	High to very high; numerous claims; known reserves.	Low to moderate; one mining claim.
Oil & Gas	Unknown	Unknown	Unknown	Unknown.
Public Access	Floatplane to Lake Minakokosa and Nutuvukti Lake.	Road to upper Shungnak; floatplane to Avaraart Lake; wheelplane along Ambler R. gravel bars; boat on Ambler R. & Mauneluk R.	None identified.	Floatplane and wheelplane landing along Kobuk; boat on Kobuk R. and Pah R.;
Recreation	High value at Lake Minakokosa.	Floating, dogsledding, hiking and camping along Ambler River and Avaraart Lake. Camping, dogsledding and hiking along Kogoluktuk and Mauneluk rivers. Floating potential along Beaver Creek and Reed R.	Unknown	Floating and camping along Kobuk R.
Reindeer Grazing	None	None	None	None
Settlement Suitability	Some low and moderate; mostly unsuitable.	Some low & moderate along access routes; mostly unsuitable; incapable along active floodplains.	Unsuitable	Mostly high, moderate, and low; incapable along active floodplain; rest unsuitable.
Subsistence	Subsistence use in this unit has been documented by studies of the DF&G, Subsistence Division, for the communities of Ambler, Anaktuvuk, Buckland, Kiana, Kobuk, Noatak, Noorvik, Selawik, and Shungnak. Subsistence use by other communities--such as Kotzebue--is known to exist, but the extent of their use has not been documented in studies for the NWAP.			

See Appendix C for a list of reports with more detailed information, and Appendix D for definition of ratings.

RESOURCE INFORMATION SUMMARY

Management Unit 3: Kobuk - Page 2 of 2

RESOURCE		SUBUNIT	
	3e	3f	3g
Fire Protection	Modified	Modified	Modified
Fish and Wildlife	Mostly B2 (moose, brown bear and caribou); A2 (above value plus ducks, geese, resident fish); some C (brown bear in mountains).	Mostly B1, (ducks, geese, caribou, moose, brown bear); some A2 in southern part, (moose and caribou winter range and migration, anadromous and resident fish).	Mostly B-1 for moose, Dall sheep, brown bear, caribou (migration, winter range). Some A2 along Redstone R. and Miluet Creek and upper extensions of tributaries for Shungnak R.; ducks and geese; resident fish.
Forestry	Spruce and hardwoods in patches along major streams.	Spruce and hardwoods in patches along major streams.	Spruce and hardwoods in patches along major streams.
Heritage Resources	Unknown	Unknown	Known sites around Norutak Lake and along Kobuk River; probable sites in Ambler River corridor.
Important Trails	None identified.	Mauneluk River trail.	Ambler - Anaktuvuk Pass trail; Redstone R. to Cutler R. trail; Ambler to Redstone R. trail; Kobuk R. to Shungnak trail; Shungnak R. trail; Mauneluk R. trail.
Minerals	Moderate	Low to moderate	Most moderate to high; some low south of Lockwood Hills and near Akiluik Mountain; numerous mining claims.
Oil & Gas	Unknown	Unknown	Unknown
Public Access	Lake landing	Wheelplane landing along Mauneluk R; boat on Mauneluk R.	Road to upper Shungnak; wheelstrip at Bornite, floatplane to Norutak; boat on Ambler and Mauneluk Rivers.
Recreation	Hiking, camping, floating	Boating, camping	Boating and camping along Ambler River and upper tributaries; camping and hiking along Redstone Creek and between Shungnak and Kogoluktuk Rivers.
Reindeer Grazing	None	None	None
Settlement Suitability	Moderate along lake; remainder of land surface low.	Moderate and active floodplain (incapable).	Low and moderate within one mile of access points and remainder of unit unsuitable. Some incapable in active floodplains.
Subsistence	Subsistence use in this unit has been documented by studies of the DF&G, Subsistence Division, for the communities of Ambler, Anaktuvuk, Buckland, Kiana, Kobuk, Noatak, Noorvik, Selawik, and Shungnak. Subsistence use by other communities—such as Kotzebue—is known to exist, but the extent of their use has not been documented in studies for the NWAP.		

See Appendix C for a list of reports with more detailed information, and Appendix D for definition of ratings.

LAND-USE DESIGNATION SUMMARY

MANAGEMENT UNIT 3 - KOBUK

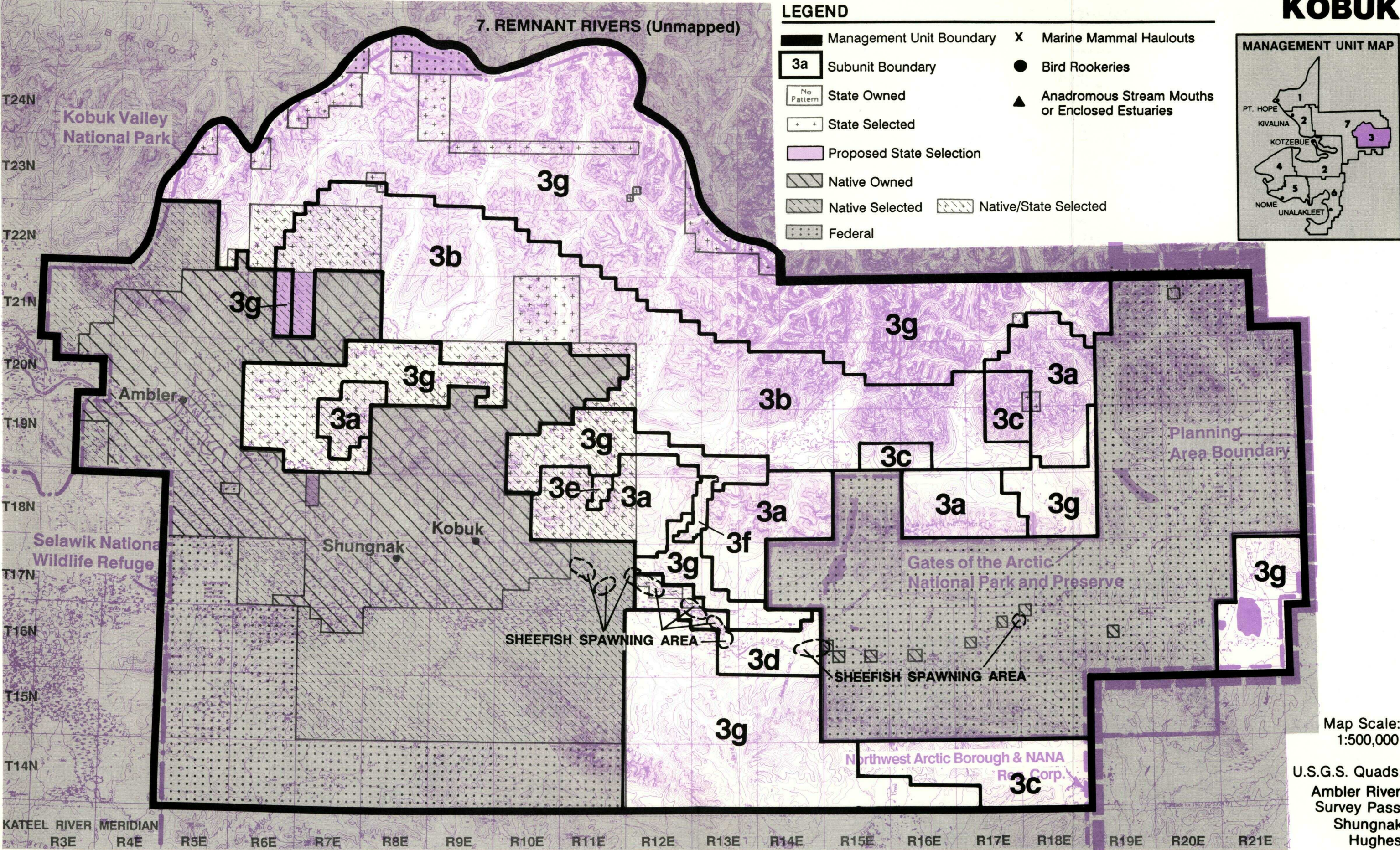
SUBUNIT	LAND USE DESIGNATIONS			COMMENTS
	PRIMARY SURFACE USE ¹	PROHIBITED SURFACE USE ²	SUBSURFACE ³	
3a	General use uplands	Land disposals Remote cabins	Open	Portions of two townships near Shungnak River proposed for state selection
3b	Minerals/ Habitat & harvest lands	Land disposals Remote cabins	Open	Portions of township north of Ambler River proposed for state selection
3c	Mineral lands	Land disposals Remote cabins	Open	
3d	Habitat & harvest/ Recreation lands	Land disposals Remote cabins Commercial rec. leases in some areas	Open, except at sheefish spawning areas	
3e	Settlement	Remote Cabins	Closed prior to sale	Kollioksak Lake 100-200 net acres
3f	Settlement	Remote Cabins	Closed prior to sale	Mauneluk River 75-100 net acres
3g	Habitat & harvest uplands	Land disposals Remote cabins	Open	Large block east of Ambler River and a small area north of Ambler River proposed for state selection

¹Secondary uses include: forestry in all subunits, remote cabins in portions of subunit 3a and 3g, and recreation in all subunits except 3c. For more details see the Resource Information Summary for this unit, and Appendix D.

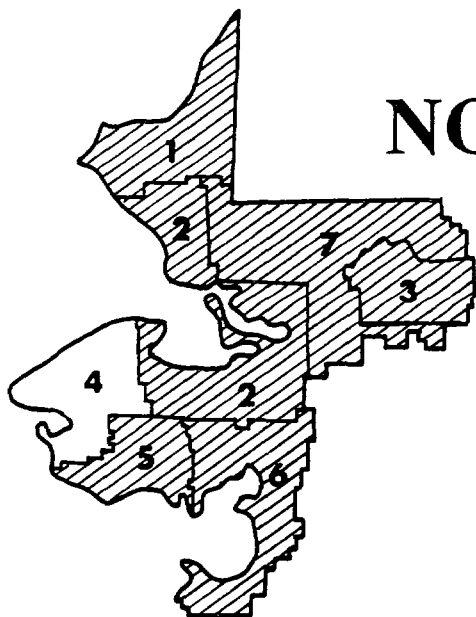
²Other uses such as material sales, land leases, or permits, that are not specifically prohibited may be allowed. Such uses will be allowed if consistent with the management intent statement, the management guidelines of this unit, and the relevant management guidelines listed in Chapter 2.

³All areas are available for leasing for leasable minerals. Statements of whether or not the unit is open to mineral entry refer only to locatable minerals. See glossary in Appendix A for definitions of leasable and locatable minerals. See Appendix H for detailed descriptions of areas closed to mineral entry.

KOBUK



Management Unit 4: NORTHWEST SEWARD PENINSULA



Background

Location and Land Ownership. Management Unit 4 includes lands on the Northwest Seward Peninsula from Cape Woolley to the boundary of the Northwest Arctic Borough just west of Cape Espenberg. The state owns the central part of the peninsula, and the upper drainages of the Nuluk, Arctic, Serpentine, Kougarok, American, and Agiapuk rivers. There are overlapping state and Native selections on the southern edge of this block of state land, and on the western tip of the peninsula in the York Mountains. The state also owns all tidelands and submerged lands along the outer coast and the protected inland waters in this region, such as Shishmaref Inlet, Arctic Lagoon, Lopp Lagoon, Port Clarence, Grantley Harbor, and Imuruk Basin. State land also includes the beds of the Kuzitrin, Agiapuk, Nuluk, Pinguk, Kaguerak, Kugrupaga, Arctic, and Serpentine rivers and other navigable waters. The remainder of the area, including nearly all uplands along the coast, is primarily in Native or federal ownership. Several parcels of private land, such as Native allotments and patented mining claims, exist in this unit. Federal lands on the northern half of

the peninsula are within the Bering Land Bridge National Monument. A portion of the Alaska Maritime National Wildlife Refuge is located near Cape York.

Resources and Land Use. Shishmaref, Wales, Teller, and Brevig Mission are year-round communities within this unit. Mary's Igloo (also called Kauwerak) was one of the first Native villages on the Seward Peninsula, but now is used only seasonally. The people from Mary's Igloo are residing in Teller until re-establishment of their community. Many of the residents of Nome use land within this unit. Residents of Diomed Island also own and use land in this unit.

The most common use of state land in this unit is for subsistence use of fish, wildlife, and other resources. Extensive wetlands provide important nesting habitat for waterfowl, and coastal areas and lagoons support marine mammals and fish. The adjacent uplands support moose, muskox, and bear. Reindeer winter range is scattered throughout the central part of the unit.

The Imuruk area is used for recreational activities, such as boating, beachcombing, and bird watching. A six-township area near Taylor and

Ear Mountain supports many active placer mining claims. The Kougarok Mountain mining area and the Lost River area are known to have significant reserves of tin. The Shishmaref area also was part of the past Hope Basin proposed oil and gas lease sale. This lease sale is not on the current state five-year lease schedule, but may be offered later.

Access. Four major communities in the unit have airports. Floatplanes and wheeled planes can land along much of the coastline on the beaches and lagoons. Access to the southern portion of this unit occurs along the Nome-Teller road, and from the road to the coast by trail. The Kougarok Road ends in the eastern portion of the unit south of Black Dome, and trails continue to Serpentine Hot Springs. Much winter travel is by snow machines along the coast and on inland trails. Boat access is also common, particularly along the coast, along the Agiapuk River, and in Port Clarence. Port Clarence is the best anchorage in western Alaska north of Dutch Harbor.

Management Intent

General. State land in this unit will be kept in public ownership and managed for multiple use. All state land in this unit will be available for leasing for coal or oil and gas. All state land will remain open to mineral entry, except for tide and submerged lands within a quarter-mile radius of two seabird rookeries. State-owned shorelands

in this unit will be managed consistent with the general management intent as described on page 3-4.

Subunits. There are six subunits in the Northwest Seward Peninsula management unit: 4a (habitat and harvest tidelands), 4b (general use uplands), 4c (mineral/habitat and harvest lands), 4d (mineral lands), 4e (general use tidelands), 4f (habitat and harvest uplands). The general management intent for these subunits is described on pages 3-4 to 3-6.

The *Resource Information Summary* chart for this unit highlights important resource values found in each subunit. The summary is based on information from various resource reports prepared for the plan (see appendices C and D).

The *Land Use Designation Summary* chart for this unit provides a quick picture of planned uses for each subunit. For a complete description of management policy, the chart must be used with the statement of management intent and the management guidelines.

Coastal Plans. Most of the unit is within the Bering Straits Coastal Resource Service Area. Activities on state land will be consistent with the policies and guidelines of the Bering Straits Coastal Management Plan (CMP). The areas listed below have been designated as Important Use Areas in the Bering Straits CMP, with special policies in the CMP for these areas (see maps in Appendix J).

Important Use Areas	Subunit
Agiapuk River	4f - habitat and harvest uplands
Arctic River	4f - habitat and harvest uplands
Brevig Lagoon	4a - habitat and harvest tidelands
Cape Woolley	4a - habitat and harvest tidelands, and 4f - habitat and harvest uplands
Grantley Harbor, Imuruk Basin, and Tuksuk Channel	4a - habitat and harvest tidelands
Ikpek Lagoon and Nuluk, Pinguk, Kaguerak, and Kugrupaga Rivers	4a - habitat and harvest tidelands, 4b - general use uplands, and 4f - habitat and harvest uplands

(continued on next page)

*(continued from previous page)***Important Use Areas****Subunit**

Kuzitrin River and Wetlands

4f - habitat and harvest uplands

Lopp Lagoon, Cape Prince of Wales

4a - habitat and harvest tidelands

Lost River Area

4e - general use tidelands

Port Clarence

4f - habitat and harvest uplands

Serpentine River

4a - habitat and harvest tidelands

In addition, the Bering Straits CMP recommended two areas in this unit for AMSAs (Areas Meriting Special Attention)--Port Clarence and Cape Prince of Wales. Part of the proposed Pilgrim River/Salmon Lake AMSA is also in this unit. When an AMSA plan is adopted for these areas, state land management will also be consistent with AMSA policies.

anadromous streams and narrow openings of enclosed estuaries such as lagoons, inlets, or basins. These areas are shown on the management unit map. For many of these stream mouths and estuaries, the location of the opening is dynamic, and the guideline will apply to their location at the time of a proposed action. Within these subunits, this guideline applies to the following areas:

Management Guidelines

Bird Rookeries and Subsurface Resources (Subunits 4a and 4e). Most state land in these subunits will remain open to new mineral entry. However, state tidelands with high or very high mineral potential within one-quarter mile of two seabird colonies--Cape York and King River (Subunit 4e)--will be closed to new mineral entry to protect this important habitat. These colonies are shown on the *Subsurface Designation Summary Map*, page 2-51, and are described in detail in Appendix H, *Mineral Orders for the Northwest Area Plan*. Special guidelines apply to all state land within one mile of any bird rookery identified on the management unit map; see Chapter 2, *Fish and Wildlife Habitat Guideline K*, page 2-8.

Commercial Recreation (Subunits 4a, 4e, and 4f). *Public and Commercial Recreation Guideline D*, page 2-23, describes state management for commercial recreation. For these subunits, this guideline prohibits commercial recreation leasing in the following areas: 21 anadromous stream mouths or enclosed estuaries, 1 marine mammal haulout, and 6 seabird rookeries, as shown on the management unit map.

Mouths of Anadromous Streams or Enclosed Estuaries (Subunits 4a, 4e, and 4f). *Fish and Wildlife Habitat Guideline J*, page 2-8, describes state management for mouths of

Anadromous Streams

Agiapuk River
Arctic River
Bluestone River
Cobblestone River
Feather River (2 mouths)
Kuzitrin River
Nuluk River
Pinguk River
Serpentine River
Spruce Creek
Trout Creek
Unnamed river west of Arctic River

Enclosed Estuaries

Arctic Lagoon
Brevig Lagoon
Grantley Harbor
Ikpek Lagoon
Lopp Lagoon
Shismaref Inlet
Tuksuk Channel
Unnamed lagoon northeast of Shishmaref Inlet

Selections (Subunits 4b and 4f). State selections are recommended for three new areas -- along the Nome-Teller road, in the Kigluaik Mountains near Mt. Osborne, and northeast of Wales. The Nome-Teller Road area includes the road right-of-way and lands along the road, many

of which are Native-selected. The road and trails that extend from the road to the coast provide important access in this region. The lands are proposed for selection because they are accessible, have mineral values, are used for grazing (including a fawning area), and are adjacent to other state land.

The Mt. Osborne area includes lands proposed for state selection just north of the Nome-Kougarok Road in the Kigluaik Mountains. The area is very scenic. The subunit's south slope is a popular camping, hunting, and fishing destination for Nome residents. The northern slope is an important subsistence moose hunting area for Brevig Mission residents. The land should be selected because of its values for minerals, public recreation, subsistence, and accessibility. Half of the proposed selection would overlap an existing Native selection.

The plan also recommends selections in the area east and north of Wales. These few isolated blocks of land are selected for mineral values and to consolidate land ownership patterns.

General. The complete set of areawide guidelines is presented in Chapter 2. The *Resource Information Summary* charts for this unit identify important trails, known or probable heritage sites, and other resource values in specific subunits that are addressed by the appropriate guidelines in Chapter 2. Any Chapter 2 guidelines could apply to certain uses within this management unit. Those most likely to apply are:

- Coordination and public notice
- Fish and wildlife habitat
- Grazing
- Heritage resources
- Subsurface resources
- Trail management

**RESOURCE INFORMATION
SUMMARY**
begins on next page



RESOURCE INFORMATION SUMMARY

Management Unit 4: Northwest Seward Peninsula - Page 1 of 2

RESOURCE	SUBUNIT		
	4a	4b	4c
Fire Protection	N/A	Limited north of Nuluk River and Budd Creek. Modified in southern portions to Amercian River. Full along Agiapuk River to Don Creek.	Limited
Fish and Wildlife	A1: 14 mouths of anadromous streams, inlets, and lagoons; three seabird rookeries. A2/B1: marine mammals, marine fish, ducks, geese, brown bear, polar bear, moose, shorebirds, anadromous and resident fish.	B2: moose, brown bear.	B1: moose, brown bear, anadromous fish.
Forestry	Driftwood	None	None
Heritage Resources	Known or high probability sites along coast, especially near Shishmaref, Cape Prince of Wales, Brevig Mission, Teller, Imuruk Basin, Nuluk, Agiapuk and Serpentine Rivers.	Probable sites along Mint, Pinguk, Nuluk, American, and Serpentine Rivers.	Historic mining activity in the Ear Mtn. and Taylor areas.
Important Trails	Shishmaref to Serpentine Hot Springs; Nome to Teller (along coast); Brevig to Teller; Teller/Brevig to Shishmaref (two routes); Teller/Brevig to Wales (along coast and overland); Teller/Brevig to Point Spencer (across Port Clarence); Brevig to Serpentine Hot Springs (north from Mary's Igloo); From Nome-Teller Road to Cape Woolley (along Feather River or Tisuk River).	Trails inland along Pinguk, Nuluk, Kugrupaga, and Arctic Rivers; Dahl Creek-Candle Trail; Coco Creek trail; Brevig/Teller to Shishmaref (two routes); Mary's Igloo to Serpentine Hot Springs.	Kougarok River
Minerals	Low or not rated.	Low to very high.	High to very high; mineral claims present; active placer and tin potential at Kougarok and Ear Mtn. mining areas.
Oil & Gas	Part of area in past-proposed Hope Basin sale.	No potential identified.	
Public Access	Coastal trails, wheelplane and floatplane landings in numerous locations along coast.	Airstrips at Harris and Black Domes. Trail access; Kougarok Road; boat access along Kougarok River; Woolley Lagoon Road.	Mining trails along rivers and creeks.
Recreation	Some bird watching near Grantley Harbor, some camping and boating on Nugnugaluktuk and Serpentine Rivers; potential recreation on Nuluk, Pinguk and Arctic Rivers; beach combing along coast.	Unknown	Unknown
Reindeer Grazing	N/A	Almost entirely winter range, except for Portage Creek drainage and areas between Budd and Igloo Creeks. Subunits east and west of Ear Mountain within a fawning area. Fawning area in valley SE of Casseterite Peak.	Some winter range in the Taylor area.
Settlement Suitability	N/A	Low potential within 1 mile of access routes; remainder of unit unsuitable.	Low potential near access systems, remainder unsuitable.
Subsistence	See note on next page		

See Appendix C for a list of reports with more detailed information, and Appendix D for definition of ratings.

RESOURCE INFORMATION SUMMARY

Management Unit 4: Northwest Seward Peninsula - Page 2 of 2

RESOURCE	SUBUNIT		
	4d	4e	4f
Fire Protection	Limited	N/A	North - limited; south and coastal - full; In between - modified.
Fish and Wildlife	B2: moose, brown bear.	A1: three seabird colonies (one at Tin City, two at Cape York); A2: along coast for marine mammals, marine fish, ducks, geese (spring, fall, nesting), brown bear, polar bear, anadromous fish.	A2/B1: moose, brown bear, anadromous fish; some portions upgraded due to human use.
Forestry	None	Driftwood	None
Heritage Resources	Historic mining activity in the Taylor area.	Probable sites near Cape York.	High probability of sites along Mint, Pinguk, Nuluk, Agiapuk, American, and Serpentine Rivers.
Important Trails	Teller to Ear Mountain; Kougarok River Road trail; Mary's Igloo to Serpentine Hot Springs.	Coastal trails: Teller to Wales; Brevig/Teller to Port Clarence.	Shishmaref to Teller (2 routes); Dahl Creek to Candle; Kougarok River, Pinguk R., Nuluk R., Kugrupaga R., Arctic R.
Minerals	High to very high; mineral claims present.	Unknown	Very low to high; mining claims present.
Oil & Gas	No potential identified.	No potential identified.	No potential identified.
Public Access	Airstrips near Taylor and at Ear Mountain; mining trails along rivers and creeks; Kougarok Road to Taylor, Teller Road and overland trail to Ear Mountain.	Floatplane or wheelplane landing areas along coast; landing strips near Port Clarence, Tin City, Lost River; coastal trails.	Four community airstrips; Teller Road, Kougarok Road; Airstrips at Igloo; Dahl Creek to Candle trail; numerous inland trails along valley bottoms; Shishmaref - Teller trail along portions of Krueger and American Creeks; boat access along Kougarok R.
Recreation	Unknown	Birdwatching and beachcombing along coast and within lagoons.	Some camping along rivers, some scenic views.
Reindeer Grazing	Some winter range in Taylor area. Entire Ear Mountain area within a fawning area.	N/A	Some winter range; several fawning areas.
Settlement Suitability	Low potential near access systems, remainder unsuitable.	N/A	Low potential within 1 mi. of all access systems. Remainder of unit unsuitable. Some incapable areas in active floodplains along Pinguk, Nuluk, Arctic, Agiapuk, and American Rivers.
Subsistence	Subsistence use in this unit has been documented by studies of the DF&G, Subsistence Division, for the communities of Brevig Mission, Deering, and Shishmaref. Subsistence use by other communities--such as Mary's Igloo, Nome, Teller, and Wales--is known to exist, but the extent of their use has not been documented in studies for the NWAP.		

See Appendix C for a list of reports with more detailed information, and Appendix D for definition of ratings.

LAND-USE DESIGNATION SUMMARY

MANAGEMENT UNIT 4 - NORTHWEST SEWARD PENINSULA

SUBUNIT	LAND USE DESIGNATIONS			COMMENTS
	PRIMARY SURFACE USE ¹	PROHIBITED SURFACE USE ²	SUBSURFACE ³	
4a	Habitat & harvest tidelands	Remote cabins Commercial rec. leases in some areas	Open	
4b	General use uplands	Land disposals Remote cabins	Open	Portions of several townships proposed for state selection east of Lopp Lagoon, along Teller Road, and near Mt. Osborne.
4c	Minerals/ Habitat & harvest lands	Land disposals Remote cabins	Open	
4d	Mineral lands	Land disposals Remote cabins	Open	
4e	General use tidelands	Remote cabins Commercial rec. leases in some areas	Open, except within 1/4 mile of 2 seabird rookeries	
4f	Habitat & harvest uplands	Land disposals Remote cabin Commercial rec. leases in some areas	Open	Portions of several townships proposed for state selection east of Lopp Lagoon, along Teller Road, and near Mt. Osborne.

¹Secondary uses include: grazing in all subunits, and recreation in subunits 4a, 4e, and 4f. For more details, see the Resource Information Summary for this unit, and Appendix D.

²Other uses such as material sales, land leases, or permits, that are not specifically prohibited may be allowed. Such uses will be allowed if consistent with the management intent statement, the management guidelines of this unit, and the relevant management guidelines listed in Chapter 2.

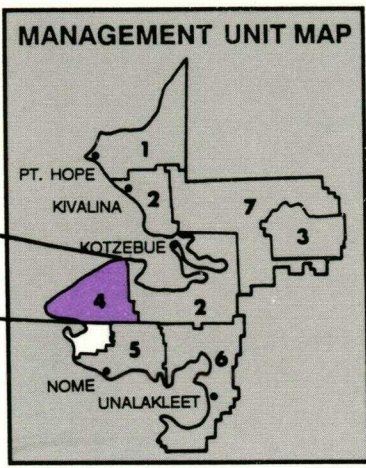
³All areas are available for leasing for leasable minerals. Statements of whether or not the unit is open to mineral entry refer only to locatable minerals. See glossary in Appendix A for definitions of leasable and locatable minerals. See Appendix H for detailed descriptions of areas closed to mineral entry.

LEGEND

- Management Unit Boundary
- 4a Subunit Boundary
- No Pattern State Owned
- + + State Selected
- Proposed State Selection
- Native Owned
- Native Selected
- Native/State Selected
- Federal
- X Marine Mammal Haulouts
- Bird Rookeries
- ▲ Anadromous Stream Mouths or Enclosed Estuaries

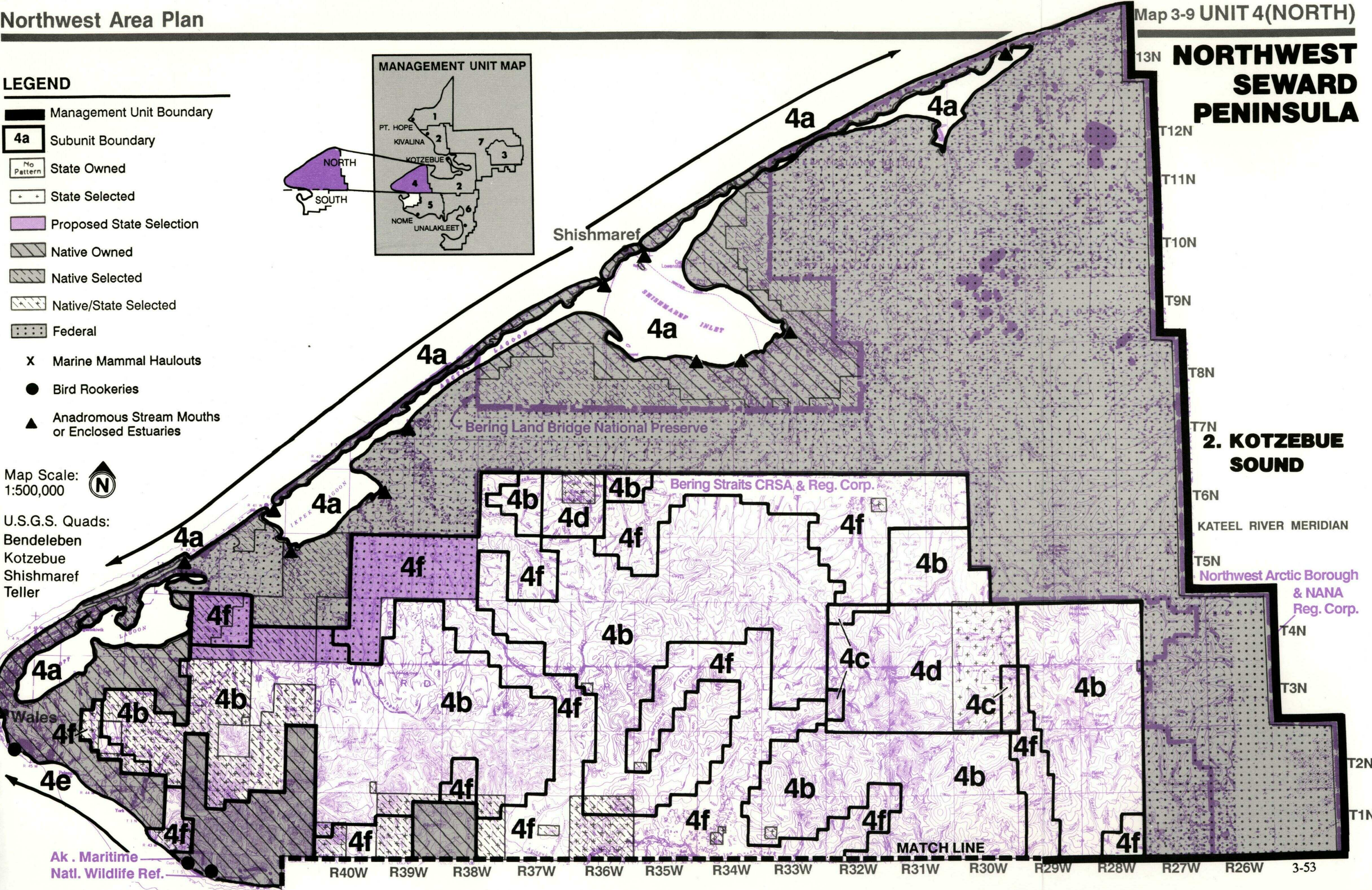
Map Scale: 1:500,000

U.S.G.S. Quads:
Bendeleben
Kotzebue
Shishmaref
Teller



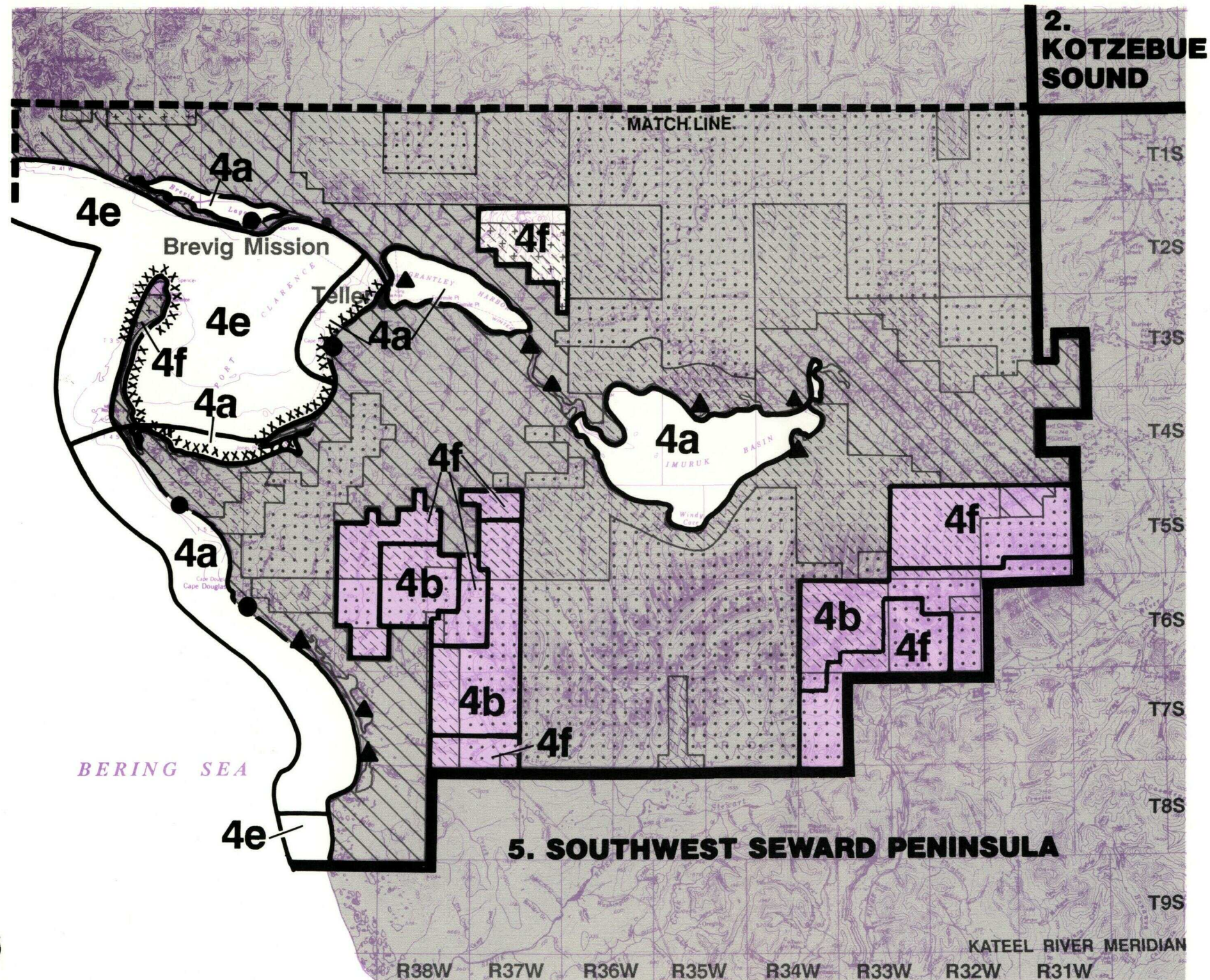
NORTHWEST SEWARD PENINSULA

2. KOTZEBUE SOUND



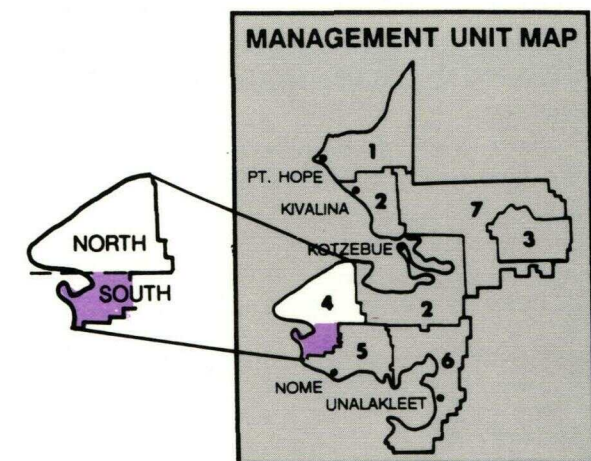
Northwest Area Plan

NORTHWEST SEWARD PENINSULA



LEGEND

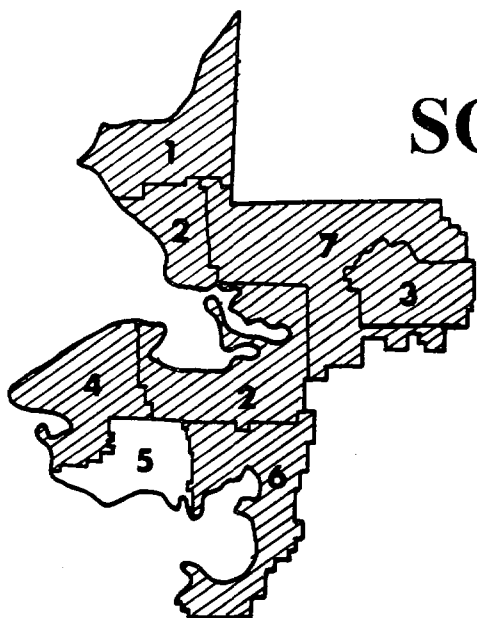
- Management Unit Boundary
- Subunit Boundary
- State Owned
- State Selected
- Proposed State Selection
- Native Owned
- Native Selected
- Native/State Selected
- Federal
- Marine Mammal Haulouts
- Bird Rookeries
- Anadromous Stream Mouths or Enclosed Estuaries



Map Scale:
1:500,000

U.S.G.S. Quads:
Nome
Teller

Management Unit 5: SOUTHWEST SEWARD PENINSULA



Background

Location and Land Ownership. This management unit includes land within drainages surrounding the north side of Norton Sound. Major waterways include the Sinuk, Nome, Eldorado, Solomon, Casadepaga, and Fish rivers. The unit also extends north along the Kougarok Road (Nome to Taylor). Most of the unit is gently rolling coastal lowlands. The tidelands of the unit extend from near Cape Woolley to Cape Darby, and include Golovnin Bay and Golovnin Lagoon.

Most of the land is state owned or selected, with large areas of overlapping state and Native selections. The northeast portion of the unit is in federal ownership, including BLM lands and the Bering Land Bridge National Preserve. Parts of the Alaska Maritime National Wildlife Refuge are within the boundaries of this unit. There are municipal uplands and tidelands in the City of Nome, and private lands belonging to the Sitenasuak, King Island, Solomon, White Mountain, Golovin, and Bering Straits Native corporations. Over half the coastline of the unit is Native owned. However, the coastline from Safety Sound to Rocky Point includes some state-owned

and state-selected lands. State ownership also includes the tidelands, except at Nome, and the beds of navigable rivers. Several parcels of private land within this unit include Native allotments and patented mining claims.

Resources and Land Uses. The communities in this area--Nome, Solomon, Council, White Mountain, and Golovin--were established as mining towns. Solomon and Council are, for the most part, seasonal settlements. Mining has taken place since the late 1800s; the Fish River mining district was the first organized mining district in northwest Alaska. Many historic sites in this area are associated with past mining activity. Placer gold mining is a major land use in this area.

Residents currently use lands in this area for hunting land and sea mammals, subsistence and commercial fishing and crabbing, berry-picking, and reindeer herding. Most of the land is covered with low tundra and shrubs, which is good reindeer and moose habitat. This unit includes extensive wetlands--particularly north of Golovnin Lagoon and Safety Sound--that are important waterfowl nesting habitat. There is a

There is a small amount of forest land in the eastern part of the unit.

Access. Access to this unit is by air, sea, roads, or trails. Airports exist at Council, Golovin, Solomon, and White Mountain. Remote landing areas for small planes are scattered throughout the unit. Boats are used mostly along the coast, in Safety Sound, Golovnin Bay and Golovnin Lagoon, and on the Niukluk, Pilgrim, Sinuk, and Fish rivers. Roads within the unit extend from Nome north to Taylor, east to Council, and northwest to Teller. Numerous trails, including the historic Iditarod Trail, provide local access. Many trails originated as mining routes.

Management Intent

General. This unit will be managed for a variety of uses. Nearly all state land will be kept in public ownership. State uplands and tidelands will be managed for multiple use, primarily mining, fish and wildlife habitat and harvest, reindeer grazing, recreation, and subsistence. Opportunities for private use of state land will be offered through four land disposals over the next 20 years. Approximately 900 acres will be offered for sale in three areas north of Nome: Pilgrim, Christian Creek, and Golden Gate Creek. Actual acreage in each unit may be adjusted up or down as the land disposals are developed. Remote cabin permits will be allowed at very low densities in the upper Sinuk River drainage. State-owned shorelands will be managed consistent with the general management intent described on page 3-4.

Nearly all state land will remain open to mineral entry. Land within proposed disposal areas will be closed to new mineral entry prior to sale. Uplands and tidelands adjacent to six important seabird rookeries along the coast from Safety Sound to Rocky Point will be closed to new mineral entry to protect nesting areas.

Subunits. There are 9 subunits in the Southwest Seward Peninsula management unit: 5a (habitat and harvest tidelands), 5b (general use uplands), 5c (mineral/habitat and harvest lands), 5d (mineral lands), 5e, 5h, and 5i (settlement), 5f (general use tidelands), and 5g (habitat and harvest uplands). The general management intent for these subunits is described on pages 3-4 to 3-6.

The *Resource Information Summary* chart for this unit highlights important resource values found in each subunit. The summary is based on information from various resource reports prepared for the plan (see appendices C and D).

The *Land Use Designation Summary* chart for this unit provides a quick picture of planned uses for each subunit. For a complete description of management policy, the chart must be used with the statement of management intent and the management guidelines.

Coastal Plans. Portions of this unit are within the Bering Straits and Nome coastal management plan boundaries and affected areas. Activities on state land within this unit will be managed consistent with the applicable coastal

Important Use Area

Subunit

Pilgrim River/Salmon Lake

5g - habitat and harvest uplands, and
5c - minerals/habitat and harvest lands

Safety Sound, Golovnin Bay/Lagoon,
and the Niukluk and Fish Rivers

5a - habitat and harvest tidelands,
5f - general use tidelands, and
5g - habitat and harvest uplands

Kuzitrin River Wetlands

5g - habitat and harvest uplands

Nome River

5d - mineral lands,
5c - minerals/habitat and harvest lands, and
5g - habitat and harvest uplands

management plan. State land is also located in the following Important Use Areas identified in the coastal management plans (see maps in Appendix J). These areas have special policies which apply through the Bering Straits Coastal Management Plan.

Several Areas Meriting Special Attention (AMSAs) are recommended in the Bering Straits Coastal Management Program. When AMSA plans are adopted for these areas, state land management will also be consistent with AMSA policies. AMSAs proposed in this unit include Golovnin Bay, Rocky Point, Safety Sound, Cape Nome, Nome River, and Pilgrim River/Salmon Lake.

Management Guidelines

Aleutian Tern Nesting Habitat (Subunits 5a, 5b, and 5g). In Safety Sound, all land use activities that would disturb nesting Aleutian terns or detrimentally alter nesting habitat will be avoided to the extent feasible and prudent. Where these activities are authorized, they will be conducted to minimize disturbance to nesting Aleutian terns or detrimental alteration of habitat. Leases or permits may include seasonal restrictions on activities to avoid impacts. DF&G will be consulted to identify current or potential nesting habitat, and to determine guidelines for mitigating any impacts.

Bird Rookeries and Subsurface Resources (Subunits 5a, 5b, and 5g). The coast along the southern shore of the Seward Peninsula contains some of the largest seabird colonies on the peninsula. Peregrine falcons also nest in this area. At Bluff, bird populations range from 40,000 to 90,000. About 75 percent of the nesting birds are murre. These seabirds feed offshore near the colonies. Offshore waters support large concentrations of sand lance--a vital food source for fish-eating seabirds. The reproductive success for some seabirds depends on availability of sand lance, availability of nesting habitat, and nondisturbance.

Most state land in these subunits remains open to new mineral entry. However, within one-quarter mile of six important seabird colonies, state tidelands with high mineral potential and state uplands will be closed to new mineral entry to protect this important habitat. For two colonies--Chiukak and Rocky Point--state uplands within one-quarter mile will be closed to

new mineral entry (Subunit 5b). For the two seabird colonies on non-state uplands at Topkok Head and Bluff, a quarter-mile radius of tidelands with high mineral potential will be closed to new mineral entry (Subunit 5a). State upland and tideland within one-quarter mile of the seabird colonies at Topkok and Eldorado Creek will be closed to new mineral entry (subunits 5a, 5b, and 5g). These sites are shown on the *Subsurface Designation Summary Map*, page 2-51 and in detail in Appendix H, *Mineral Orders for the Northwest Area Plan*. For other guidelines that apply to bird rookeries or state land within this management unit, see *Fish and Wildlife Habitat Guideline K*, page 2-8.

Commercial Recreation (Subunits 5a, 5b, 5f, and 5g). *Public and Commercial Recreation*, Guideline D, page 2-23, describes state management for commercial recreation. For these subunits, this guideline prohibits commercial recreation leasing in the following areas: 19 anadromous stream mouths or enclosed estuaries, 2 marine mammal haulouts, and 9 seabird rookeries, shown on the management unit map.

Land Disposal (Subunits 5e, 5h, and 5i). Four settlement areas are designated in the Southwest Seward Peninsula Management Unit: Christian Creek (5e) will be available for a net disposal of approximately 650 acres of land; Pilgrim (5h) will be available for a net disposal of approximately 100 acres of land, and the Golden Gate (5i) will be available for a net disposal of approximately 150 acres. For each land sale, a five year extension will be added to the existing statutory timing for subdivision of parcels.

Most of the Pilgrim area (gross acreage) is likely to be reconveyed to the Bering Straits Native Corporation (BSNC). All of the Golden Gate area is on overlapping selections with BSNC, and could be conveyed to them.

During the design phase of these disposals, Bering Straits Coastal Resource Service Area, Bering Straits Native Corporation, and the DNR Division of Mining should be consulted. Existing mineral closures for previously proposed disposal areas - Grand Central and Pilgrim - will be re-evaluated. Additionally, DNR staff should be present in Nome prior to, and during, the disposals.

Pacing. Because of concerns about impacts on community lifestyles or resources, these land offerings should be phased over a number of years:

Disposal	Offer After	Acres	Parcels
Christian Creek	1990	650	all available parcels
Golden Gate I	1995	80	1/2 available parcels
Pilgrim	2000	100	all available parcels
Golden Gate II	2005	70	all remaining parcels
TOTAL		900	

Pilgrim River Setback. The Pilgrim River is an important stream for red salmon spawning, rearing, and migration. This is the northernmost known migration of red salmon, and the only red salmon spawning area in the planning area. For Subunit 5h, there will be a quarter-mile staking setback from the ordinary high water mark on the Pilgrim River; the buffer will be retained in public ownership and managed for wildlife habitat. When the land disposal process is developed, land one-quarter mile either side of Pilgrim River will be reclassified as wildlife habitat land. Public notice for the reclassification will be simultaneous with public notice for the sale.

Mouths of Anadromous Streams, or Enclosed Estuaries (Subunits 5a, 5b, 5f, and 5g). *Fish and Wildlife Habitat* Guideline J, page 2-8, describes state management for mouths of anadromous streams and narrow openings of enclosed estuaries such as lagoons, inlets, or basins. These stream mouths and estuaries are shown on the management unit maps. For many of these stream mouths and estuaries, the location of the opening is dynamic, and the guideline will apply to their location at the time of a proposed action. Within these subunits, this guideline applies to the following areas:

Anadromous Streams

Bonanza River
Saunders River
Cheenik River
Silverbow Creek
Cripple River
Sinuk River
Eldorado River
Snake River
Fish River (three mouths)
Solomon River
Kachauik River
Topkok River
Nome River
Yuonglik River
Penny River

Enclosed Estuaries

Golovnin Lagoon
Safety Sound

Remote Cabin Permits (Subunits 5b and 5g). The Sinuk River is identified for remote cabin permits. The following area is open to four remote cabin permits:

T8S, R35W, KRM, E1/2; T8S, R34W, KRM, W1/2

General. The complete set of areawide guidelines is presented in Chapter 2. The *Resource Information Summary* charts for this unit identify important trails, known or probable heritage sites, and other resource values in specific subunits that are addressed by the appropriate guidelines in Chapter 2. Any of the Chapter 2 guidelines could apply to certain uses within this management unit. Those that are most likely to apply are

- Coordination and public notice
- Fish and wildlife habitat
- Forestry
- Grazing
- Heritage resources
- Lakeshore management
- Public access
- Public and commercial recreation
- Remote cabins and trapping cabins
- Settlement
- Stream corridors and instream flow
- Subsurface resources
- Trail management

RESOURCE INFORMATION SUMMARY

Management Unit 5: Southwest Seward Peninsula - Page 1 of 3

RESOURCE	SUBUNIT			
	5a	5b	5c	5d
Fire Protection	Full	Full	Full	Mostly full; moderate north of Kuzitrin River.
Fish and Wildlife	A1: nine seabird rookeries and nine anadromous stream mouths; A2: ducks & geese brown bear, moose, herring in Golovnin Lagoon; marine mammals, marine fish.	A1: five seabird rookeries. Mostly B2, some C.	A2/B1/B2: moose, anadromous fish, ducks & geese, brown bear.	Mostly B2, some C.
Forestry	Driftwood	Trees in Fish River drainage (east end of unit).	None	None
Heritage Resources	Known coastal sites: Rocky Pt. to Topkok, Golovnin Lagoon, and Safety Sound.	Known sites: near Eldorado and Canyon Creek.	Nome Historic Mining District; known sites near Ruby.	Known sites: east of Nome area and near Canyon Creek.
Important Trails	Iditarod Trail; Golovnin Bay winter trail; Golovin to White Mountain winter trail; Safety Sound trails.	Iditarod Trail; Nome to Shishmaref winter trail; Sinuk River trail; Penny River trail; Bluff to White Mountain winter trail; Solomon R. to Casadapaga R.	Nome River trail; Casadapaga and Niukluk Rivers; American Creek to Iron Creek; Pilgrim River.	Nome to Eldorado R. trails; Casadapaga R. to Iron Creek; American Creek to Iron Creek.
Minerals	Moderate to very high on coast; Golovnin Bay, low to moderate; some mining claims along coast.	Low to very high; numerous mining claims.	High to very high; mining claims in many active claim blocks.	High to very high; mining claims in many active claim blocks.
Oil & Gas	Unknown	Unknown	Unknown	Unknown
Public Access	Boat along coast and up Fish R.; floatplane in protected areas.	Nome-Taylor, Teller, Council, Ruby roads; Iditarod Trail in east end; local trails.	Nome-Taylor Road; plane landings in upper Niukluk; local trails along rivers.	Nome road system; plane landings in upper block; local trails along river.
Recreation	Along coast, Topkok to Bluff; upper Golovnin Lagoon.	Scenic views and recreation potential in the Kigluaik Mts.	Along Niukluk R. and Fish R.	Unknown
Reindeer Grazing	N/A	Fawning areas: Eldorado Creek, Kwiktalik Mt., Ptarmigan Creek; some winter range.	Some winter range.	Mostly winter range.
Settlement Suitability	N/A	Low along rivers, rest unsuitable.	Low along rivers, rest unsuitable.	Low along rivers, rest unsuitable.
Subsistence	Subsistence use in this unit has been documented by studies of the DF&G, Subsistence Division, for the communities of Shishmaref and Brevig Mission. Subsistence use by other communities—such as Nome, Teller, Mary's Igloo, Wales, White Mountain, Council, and Golovin—is known to exist, but the extent of their use has not been documented in studies for the NWAP.			

See Appendix C for a list of reports with more detailed information, and Appendix D for definition of ratings.

RESOURCE INFORMATION SUMMARY

Management Unit 5: Southwest Seward Peninsula - Page 2 of 3

RESOURCE	SUBUNIT		
	5e	5f	5g
Fire Protection	Full	Full	Mostly full; modified north of Kuzitrin R.
Fish and Wildlife	B1: anadromous fish or resident fish, moose winter range; upgraded due to human use (Brevig area). B2: moose, brown bear.	A1: eight mouths of anadromous streams. A2: marine mammals, marine fish, ducks & geese, anadromous fish, brown bear, moose.	A1: three seabird rookeries and three mouths of anadromous fish streams. A/2/B1: moose, anadromous fish, ducks & geese, brown bear.
Forestry	None	Driftwood	Trees along Morris Creek (east end).
Heritage Resources	Unknown	All coastal areas have known cultural values, especially the Snake, Sinuk and Nome R. corridors and Cape Nome.	Known sites: near Ruby, and the Eldorado, Sinuk and Flambeau R.
Important Trails	Grand Central R. trail; trail along Nome-Taylor Road	Coastal trails.	Nome to Shishmaref winter trail; Sinuk River trail; Penny River trail; Bluff to White Mountain winter trail; Bonanza River, Eldorado River, Flambeau River.
Minerals	High to moderate potential; some mining claims.	Low to very high; some mining claims along coast.	Mostly moderate, some low and high; some mining claims.
Oil & Gas	Unknown	Unknown	Unknown
Public Access	Kougarok Road.	Boat along coast.	Nome-Taylor, Council, Pilgrim Hot Springs, and Teller Roads; landings at Tajata Creek, Salmon Lake and upper Niukluk; local trails; boat on lower rivers.
Recreation	Along Nome R.	N/A	Along road and major rivers, especially Niukluk R.; scenic views and recreation potential in the Kigluaik Mts. and Mt. Osborne.
Reindeer Grazing	Winter range.	N/A	Fawning areas: Eldorado Creek, Kwiktalik Mts., Ptarmigan Creek; some winter range.
Settlement Suitability	Low		Mixed low and unsuitable.
Subsistence	Subsistence use in this unit has been documented by studies of the DF&G, Subsistence Division, for the communities of Shishmaref and Brevig Mission. Subsistence use by other communities--such as Nome, Teller, Mary's Igloo, Wales, White Mountain, Council, and Golovin--is known to exist, but the extent of their use has not been documented in studies for the NWAP.		

See Appendix C for a list of reports with more detailed information, and Appendix D for definition of ratings.

RESOURCE INFORMATION SUMMARY **Management Unit 5: Southwest Seward Peninsula - Page 3 of 3**

RESOURCE	SUBUNIT	
	5h	5i
Fire Protection	Full	Full
Fish and Wildlife	B1 along Salmon Lake and Pilgrim River; rest B2/C: moose, anadromous and resident fish.	B1: moose, anadromous fish, brown bear.
Forestry	None	None
Heritage Resources	Known sites: Pilgrim Hot Springs, Salmon Lake.	Nome Historic Mining District.
Important Trails	Pilgrim River trail	Nome River trail
Minerals	Very High; some mining claims.	High
Oil & Gas	Unknown	Unknown
Public Access	Kougarok Road; trail/boat along Pilgrim River.	Teller Highway; boat along Nome River.
Recreation	Unknown	Along river.
Reindeer Grazing	Some winter range in SW corner; rest nothing.	Winter range.
Settlement Suitability	Low	Low
Subsistence	Subsistence use in this unit has been documented by studies of the DF&G, Subsistence Division, for the communities of Shishmaref and Brevig Mission. Subsistence use by other communities—such as Nome, Teller, Mary's Igloo, Wales, White Mountain, Council, and Golovin—is known to exist, but the extent of their use has not been documented in studies for the NWAP.	

See Appendix C for a list of reports with more detailed information, and Appendix D for definition of ratings.

LAND-USE DESIGNATION SUMMARY

MANAGEMENT UNIT 5 - SOUTHWEST SEWARD PENINSULA

SUBUNIT	LAND USE DESIGNATIONS			COMMENTS
	PRIMARY SURFACE USE ¹	PROHIBITED SURFACE USE ²	SUBSURFACE ³	
5a	Habitat & harvest tidelands	Remote cabins Commercial rec. leases in some areas	Open, except within 1/4 mile of 4 seabird rookeries	
5b	General use uplands	Land disposals Remote cabins except in the Sinuk River area Commercial rec. leases in some areas	Open, except within 1/4 mile of 3 seabird rookeries	
5c	Minerals/ Habitat and harvest lands	Land disposals Remote cabins	Open	
5d	Mineral lands	Land disposals Remote cabins	Open	
5e	Settlement	Remote cabins Commercial rec. leases in some areas	Closed prior to sale	Christian Creek 650 net acres
5f	General use tidelands	Remote cabins Commercial rec. leases in some areas	Open	
5g	Habitat & harvest uplands	Land disposals Remote cabins except in the Sinuk River area	Open, except within 1/4 mile of 1 seabird rookery	
5h	Settlement	Remote cabins Commercial rec. leases in some areas	Closed prior to sale	Pilgrim 100 net acres
5i	Settlement	Remote cabins Commercial rec. leases in some areas	Closed prior to sale	Golden Gate 150 net acres

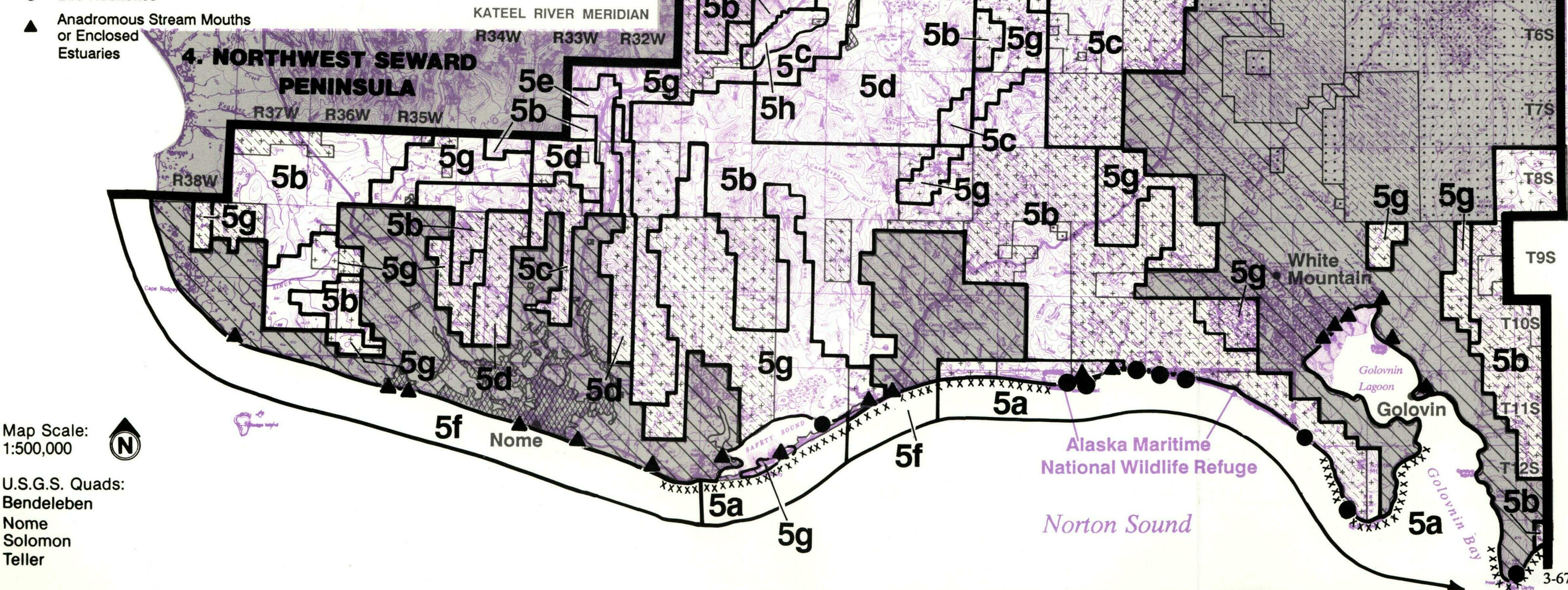
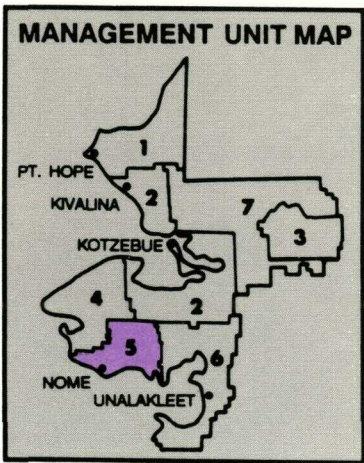
¹Secondary uses include: forestry in subunits 5b and 5g; reindeer grazing in all subunits except 5a and 5f; recreation in subunits 5a, 5c, 5e, 5g, and 5i.

²Other uses such as material sales, land leases, or permits, that are not specifically prohibited may be allowed. Such uses will be allowed if consistent with the management intent statement, the management guidelines of this unit, and the relevant management guidelines listed in Chapter 2.

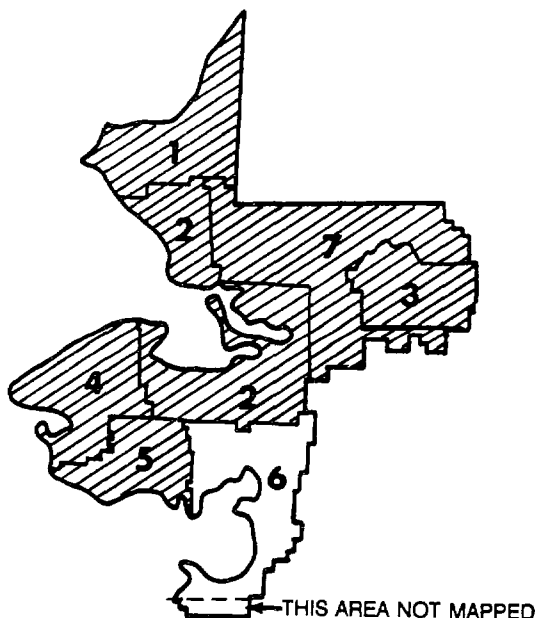
³All areas are available for leasing for leasable minerals. Statements of whether or not the unit is open to mineral entry refer only to locatable minerals. See glossary in Appendix A for definitions of leasable and locatable minerals. See Appendix H for detailed descriptions of areas closed to mineral entry.

LEGEND

- Management Unit Boundary
- 5a Subunit Boundary
- No Pattern State Owned
- + State Selected
- Native Owned
- Native Selected
- Native/State Selected
- Federal
- Privately Owned
- X Marine Mammal Haulouts
- Bird Rookeries
- ▲ Anadromous Stream Mouths or Enclosed Estuaries



Management Unit 6: NORTON SOUND



Background

Location and Land Ownership. This unit includes lands that drain into Norton Sound from Cape Darby in the north to St. Michael and Stebbins in the south. Most of the uplands in this unit are under federal or Native ownership. Several parcels of private land, such as Native allotments and patented mining claims, exist in this unit. State ownership is limited to uplands north of the Koyuk River, the tidelands, and the beds of navigable rivers, such as the Tubutulik, Kwiniuk, Kwik, Koyuk, Inglutalik, Ungalik, Shaktoolik, and Unalakleet. The Unalakleet River is part of the federal wild and scenic river system.

Resources and Land Uses. The communities of Elim, Koyuk, Shaktoolik, Unalakleet, St. Michael, and Stebbins are within this unit. Residents of these communities and others use the area for hunting, fishing, reindeer herding, mining, and subsistence activities. Although the communities rely on coastal resources for much of their harvest, they also use the Koyuk River and other inland areas for harvesting caribou, moose, brown bear, and furbearers. Caribou migrate through portions of this unit, and late fall and winter hunting is an important activity here. The main uses of state tidelands and submerged lands

are for fish and wildlife habitat and harvest, access routes, and recreation. Public recreation is concentrated along the Koyuk, Egavik, Shaktoolik, and Unalakleet rivers, St. Michael Bay, and Stuart Canal. Tideland areas support herring spawning, belukha, ringed seal, walrus, ducks, geese, and anadromous fish. There are numerous seabird rookeries along the coast. All coastal areas, especially at Shaktoolik, Koyuk, Isaacs Roadhouse, Unalakleet River, Twenty-two Mile Cabin, and the Innoko River, have known cultural values. Anvik River and Shaktoolik River have a high probability for discovery of additional cultural sites. The offshore Norton oil and gas basin was proposed for a lease sale, but the sale was cancelled in 1983. It is not on the present five-year oil and gas lease sale schedule.

Access. Access to the unit is by air, sea, or overland trail. Community airports exist at all villages. The district airport at Unalakleet has jet facilities. Other access within the unit is by boat along the navigable rivers and along the coast, by wheelplane or floatplane along the coast, and by snowmachine or dogsled along the numerous regional and local trails. Major trails follow the Inglutalik, Ungalik, Shaktoolik, Unalakleet, North, and Koyuk rivers. The Iditarod Trail ex-

tends along the Unalakleet River and north along the coast through Shaktoolik, Koyuk, and Elim.

Management Intent

General. State uplands, tidelands and submerged lands in this unit will remain in public ownership and be managed for multiple use. State land will remain open to new mineral entry. State-owned shoreland will be managed as described in the general management intent on page 3-4.

Subunits. There are three subunits in the Norton Sound Management Unit: 6a (habitat and harvest tidelands), 6b (general use uplands), and 6c (habitat and harvest uplands). The general management intent for these subunits is described on pages 3-4 to 3-6.

The *Resource Information Summary* chart for this unit highlights important resource values found in each subunit. The summary is based on information from various resource reports prepared for the plan (see appendices C and D).

The *Land Use Designation Summary* chart for this unit provides a quick picture of planned uses for each subunit. For a complete description of management policy, the chart must be used with the statement of management intent and the management guidelines.

Coastal Plans. Portions of the Norton Sound Management Unit are within the Bering Straits Coastal Management Plan (CMP) boundaries. Activities on state land within this unit will be managed consistent with CMP policies. Areas identified as Important Use Areas in the Bering Straits CMP are listed below and shown on maps in Appendix J. These areas have special policies for subsistence which apply through the CMP.

Two areas, the Portage Roadhouse and the Stuart Island/Klikitarik area in Subunit 6a (habitat and harvest tidelands), have been recommended for designation as Areas Meriting Special Attention (AMSAs) by the Bering Straits Coastal Management Program. Management of state land within the AMSA will be consistent with the AMSA plan when it is adopted.

Management Guidelines

Bird Rookeries and Subsurface Resources (Subunit 6a). Cape Denbigh and other cliffs south along the coast are home for large colonies of seabirds, including common murres, pelagic cormorants, and horned puffins. Seasonally, between 14,000 and 20,000 seabirds occupy the colony at Cape Denbigh. For special guidelines that apply to bird rookeries and other sites on state land within these subunits, see Fish and Wildlife Habitat Guideline K, page 2-8.

Commercial Recreation (Subunit 6a). *Public and Commercial Recreation* Guideline D, page 2-23, describes state management for

Important Use Areas

Island Point to Beeson Slough
Kwiniuk, Tubutulik, & Kwik Rivers
Koyuk River

Stebbins Wetlands
St. Michael Bay
Unalakleet River

Subunit

6a - habitat and harvest tidelands
6a - habitat and harvest tidelands
6a - habitat and harvest tidelands, and
6c - habitat and harvest uplands
6a - habitat and harvest tidelands
6a - habitat and harvest tidelands
6a - habitat and harvest tidelands

commercial recreation. For this subunit, this guideline prohibits commercial recreation leasing in the following areas: 25 anadromous stream mouths or enclosed estuaries, 6 marine mammal haulouts, and 14 seabird rookeries, as shown on the management unit map.

Mouths of Anadromous Streams or Enclosed Estuaries (Subunit 6a). *Fish and Wildlife Habitat* Guideline J, page 2-8, describes state management for mouths of anadromous streams and narrow openings of enclosed estuaries, such as lagoons, inlets, or basins. These areas are shown on the management unit maps. For many of these stream mouths and estuaries the location of the opening is dynamic, and the guideline will apply to their location at the time of a proposed action. Within these subunits, this guideline applies to the following areas:

Anadromous Streams

Carson Creek	Mukluktulik River
Egavik Creek	Pikmiktalik River
Golsovia River	Point Creek
Inglutalik River	Powers Creek
Kogok River	Shaktoolik River
Iron Creek	Spruce Creek
Koyuk River	Tagoomenik River
Kuiak River	Tubutulik River
Kuinktalik River	Unalakleet River
Kwik River	Ungalik River
Kwiniuk River	Unnamed river west of the Kwik River
Little St. Michael River	

Enclosed Estuaries

Shaktoolik Bay
Kwiniuk Inlet

Remote Cabins (Subunits 6b and 6c). The upper Koyuk River area is identified for remote cabin permits. The following area is open to ten remote cabin permits:

T1S R19W KRM sections 19-36

T1S R18W KRM sections 1,2,11-14 & 19-36

T1S R17W KRM

T1S R16W KRM

T2S R17W KRM sections 1-5, 8-17, 20-29 & 32-36

T2S R16W KRM

Selections (Subunits 6b and 6c). The plan recommends selecting lands along the middle Koyuk River because of mineral, wildlife, access, subsistence, and recreation values.

General. The complete set of areawide guidelines is presented in Chapter 2. The *Resource Information Summary* charts for this unit identify important trails, known or probable heritage sites, and other resource values in specific subunits that are addressed by the appropriate guidelines in Chapter 2. Any of the Chapter 2 guidelines could apply to certain uses within this management unit. Those that are most likely to apply are:

- Coordination and public notice
- Fish and wildlife habitat
- Grazing
- Heritage resources
- Public and commercial recreation
- Remote cabins and trapping cabins
- Subsurface resources
- Trail management

RESOURCE INFORMATION SUMMARY

Management Unit 6: Norton Sound

RESOURCE	SUBUNIT		
	6a	6b	6c
Fire Protection	N/A	Mostly full protection south of Peace R./Koyuk R.; modified remainder; critical at Haycock.	Modified, except south of Koyuk River (full).
Fish and Wildlife	A1: at 13 bird rookeries and 23 anadromous stream mouths; A2/B1: habitat for herring spawning, belukha, ringed seal, walrus, ducks and geese, moose, caribou and brown bear.	B2: moose, brown bear, caribou (east of Kugruk-Koyuk River valleys).	A2/B1: ducks, geese (spring, fall), brown bear, moose (winter range), caribou, anadromous fish.
Forestry	Driftwood	Spruce and/or hardwoods along upper reaches of Peace, Koyuk, and East Fork Koyuk Rivers.	Spruce and/or hardwoods along upper reaches of Peace, Koyuk, and East Fork Koyuk Rivers.
Heritage Resources	Known values along coast, especially at Shaktoolik, Cape Denbigh, Unalakleet River, Twenty-two Mile Cabin and Innoko River. Probable site on Anvik and Shaktoolik Rivers.	Unknown	Unknown
Important Trails	Iditarod Trail; Inglutalik R. trail; Ungalik R. trail; Shaktoolik R.; Unalakleet R. trail; Tubutulik R.; across Norton Bay and along coast.	Trails from Koyuk to Buckland, Deering, Candle, Granite Mtn., Haycock, Kiwalik R.; White Mountain to Candle (Fish R. to Kiwalik R.).	Trails along Koyuk R. and to Buckland, Deering, Candle, Granite Mtn., Haycock, Kiwalik R.; White Mtn. to Candle (Fish R. to Kiwalik R.).
Minerals	Not rated, but estimated low potential in area from around Tolstoi Point to Cape Denbigh, (cretaceous flysh deposits).	Mostly low to moderate; some high and very high potential; some mining claims, especially near Haycock.	Low to moderate to high potential; a few placer claims.
Oil & Gas	Norton Basin offshore. State lease sale proposed in 1981 and cancelled in 1983.	Unknown potential.	Unknown potential.
Public Access	Wheel and floatplane and boat access along coast. Trails around and across Norton Bay; community airstrips at Elim, Koyuk, Shaktoolik, Unalakleet, St. Michael, Stebbins.	Remote airstrips on Gold Run Creek and on Koyuk River upstream from Dime Landing; regional and local trails.	Regional and local trails.
Recreation	Recreation opportunities along Koyuk, Egavik, Shaktoolik, North Fork, Unalakleet Rivers, Stuart Canal, and St. Michael Bay.	Unknown or low.	Mostly unknown or low, some potential along Koyuk River and tributaries.
Reindeer Grazing	N/A	Large areas of winter range.	Large areas of winter range along Koyuk R.
Settlement Suitability	N/A	Mostly unsuitable, some low potential along major rivers.	Mostly unsuitable to low, some moderate potential along major rivers.
Subsistence	Subsistence use in this unit has been documented by studies of the DF&G, Subsistence Division, for the communities of Unalakleet and Shaktoolik. Subsistence use by other communities—such as Golovin, Elim, Koyuk, and St. Michael—is known to exist, but the extent of their use has not been documented in studies for the NWAP.		

See Appendix C for a list of reports with more detailed information, and Appendix D for definition of ratings.

LAND-USE DESIGNATION SUMMARY

MANAGEMENT UNIT 6 - NORTON SOUND

SUBUNIT	LAND USE DESIGNATIONS			COMMENTS
	PRIMARY SURFACE USE ¹	PROHIBITED SURFACE USE ²	SUBSURFACE ³	
6a	Habitat & harvest tidelands	Remote cabins Commercial rec. leases in some areas	Open	
6b	General use uplands	Land disposals Remote cabins except in upper Koyuk River	Open	Portions of several townships in middle Koyuk River proposed for state selections
6c	Habitat & harvest uplands	Land disposals Remote cabins except in upper Koyuk River	Open	Portions of several townships in middle Koyuk River proposed for state selections

¹Secondary uses include: forestry and reindeer grazing in subunits 6b and 6c; recreation in subunit 6a.

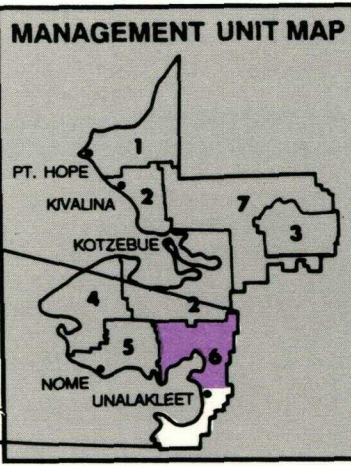
²Other uses such as material sales, land leases, or permits, that are not specifically prohibited may be allowed. Such uses will be allowed if consistent with the management intent statement, the management guidelines of this unit, and the relevant management guidelines listed in Chapter 2.

³All areas are available for leasing for leasable minerals. Statements of whether or not the unit is open to mineral entry refer only to locatable minerals. See glossary in Appendix A for definitions of leasable and locatable minerals. See Appendix H for detailed descriptions of areas closed to mineral entry.

NORTON SOUND

LEGEND

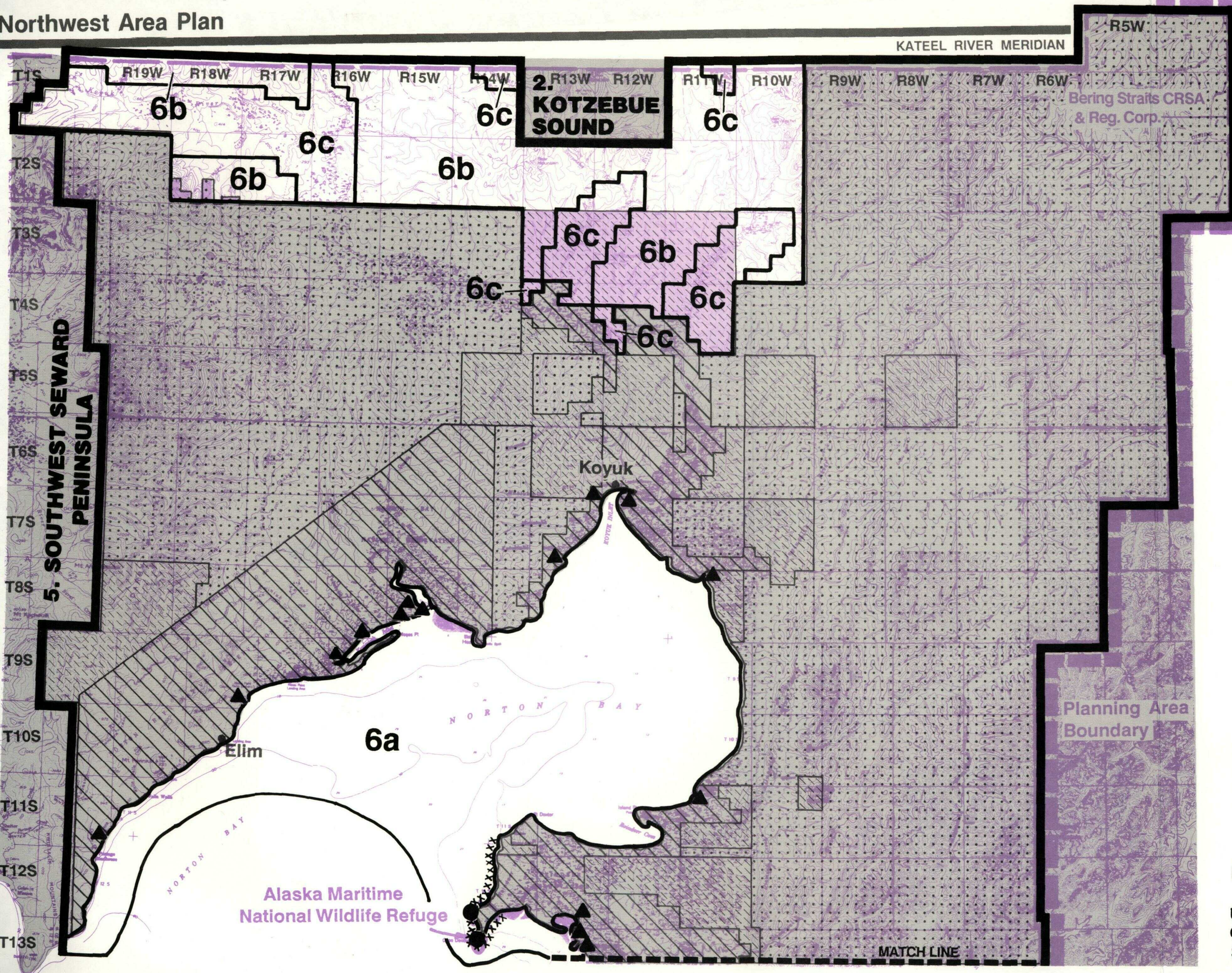
- Management Unit Boundary
- 6a Subunit Boundary
- No Pattern State Owned
- + + State Selected
- Proposed State Selection
- Native Owned
- Native Selected
- Federal
- X Marine Mammal Haulouts
- Bird Rookeries
- ▲ Anadromous Stream Mouths or Enclosed Estuaries



Map Scale: 1:500,000



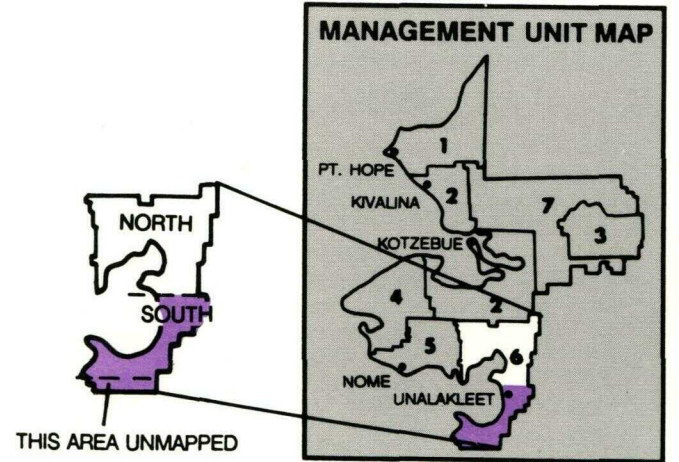
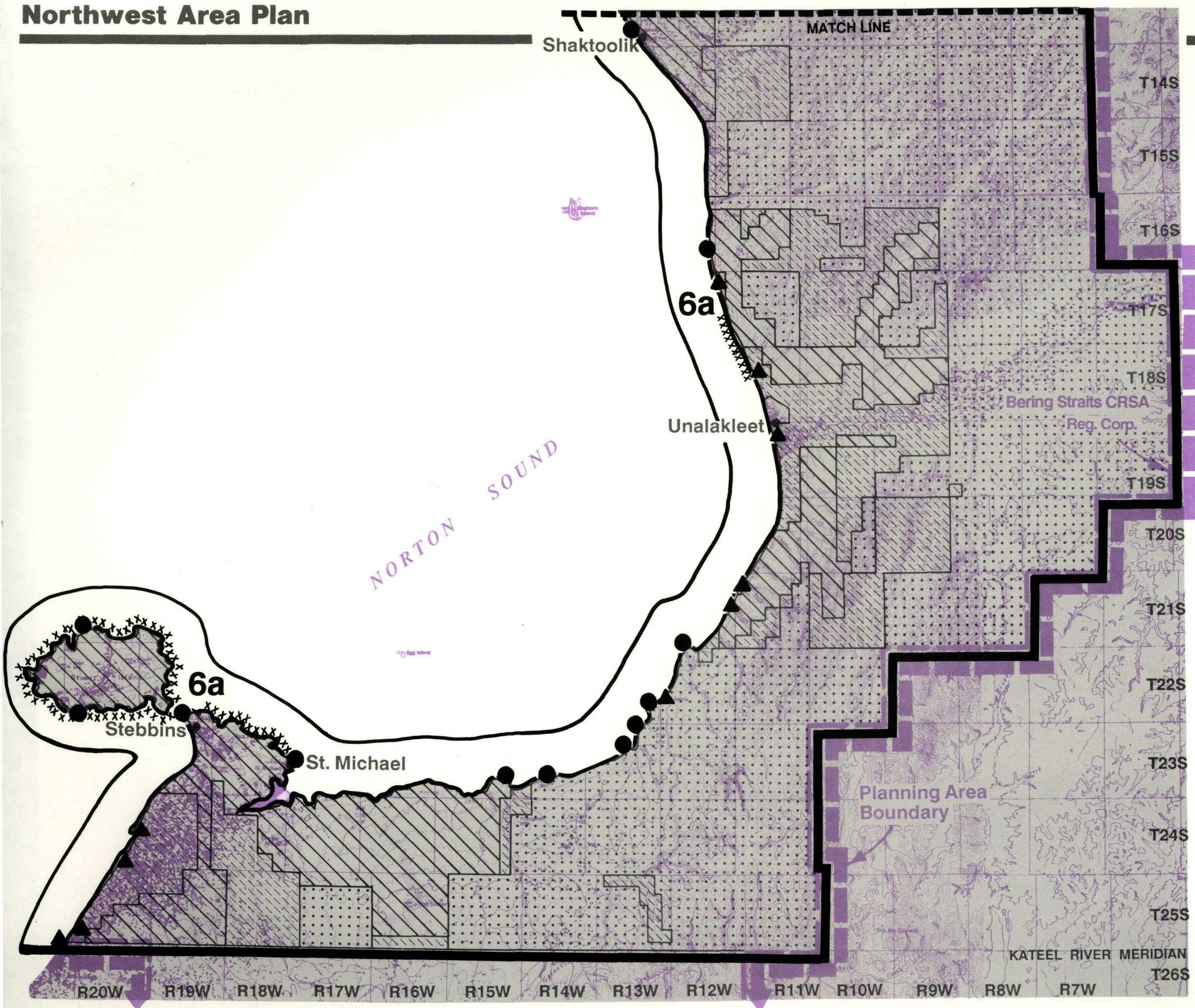
U.S.G.S. Quads:
Candle Norton Bay
Solomon Bendeleben 3-75



NORTON SOUND

LEGEND

- Management Unit Boundary
- 6a Subunit Boundary
- No Pattern State Owned
- + + State Selected
- Native Owned
- Native Selected
- Federal
- X Marine Mammal Haulouts
- Bird Rookeries
- ▲ Anadromous Stream Mouths or Enclosed Estuaries

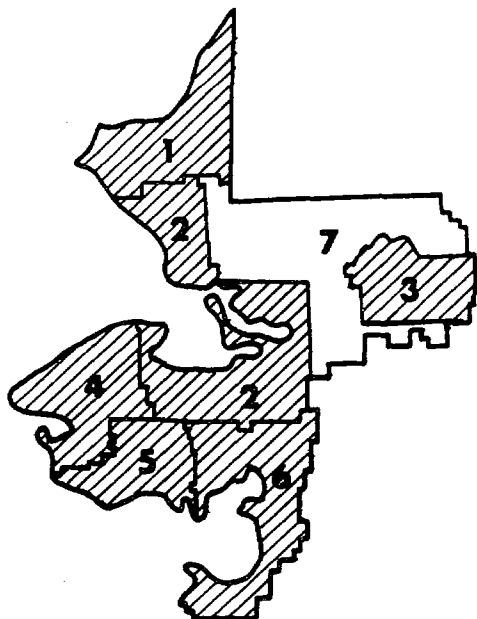


Map Scale:
1:500,000



U.S.G.S. Quads:
Norton Bay

Management Unit 7: REMNANT RIVERS



Background

Location and Land Ownership. This management unit consists of state-owned shorelands under the Kobuk, Noatak, and other navigable waters outside other management units. The state owns the beds of navigable waterways (these are called shorelands) as defined by federal law. A determination of navigability is made when land is transferred from federal ownership to private owners, or when requested by a federal land manager. DNR also makes determinations when needed because of a state interest.

Within the Northwest planning area, the Noatak and Kobuk rivers have been determined navigable. The uplands adjacent to these rivers are primarily federally owned land administered by the National Park Service as part of the Noatak National Preserve and the Kobuk Valley National Park. In addition, some Native-owned and other private land is adjacent to these rivers.

Resources and Land Uses. Navigability has been determined for only a few rivers in the planning area, but many more are undoubtedly navigable. The rivers are used for a variety of subsistence activities and for barge transport, and serve as important access corridors for village and

regional travel. The Noatak and Kobuk Rivers and other rivers within the National Parks are used for recreation by visitors from all over the world. The river beds and riparian vegetation provide important habitat. Very little vegetated riparian habitat is state owned. State ownership is largely confined to riverbeds and gravel bars.

Management Intent

General. Except for the Noatak and Kobuk rivers, the state-owned shorelands beneath rivers in this unit will not be classified as a part of this plan. However, state land use authorizations for these rivers will be consistent with the management guidelines in this plan. These rivers will remain in state ownership, be available for multiple use, and remain open to mineral entry. In general, they will be managed to protect existing uses, including subsistence, habitat and harvest, recreation, trail and other transportation uses. These shorelands will be managed consistent with policies for other shorelands in the planning area as described in the general management intent on p. 3-4.

Noatak and Kobuk Rivers Subunit. Noatak and Kobuk river shorelands will be kept in state ownership and managed for multiple use with emphasis on public recreation, habitat, subsistence, public access, and transportation. Management will protect the quality of the existing habitat and the use of the rivers for fishing, hunting, and transportation (including winter trails on or along these rivers.) These rivers have national importance for recreation, and state management will take into account potential conflicts and impacts on the recreation quality of the rivers. Gravel extraction is allowed when consistent with the policies found in Chapter 2.

Most shorelands within this subunit remain open to mineral entry. Four sheefish spawning areas on the Kobuk River will be closed to mineral entry to protect that important habitat. The sheefish spawning areas are shown on the management unit maps for Unit 3, and in detail in Appendix H.

The *Resource Information Summary* chart for this subunit highlights important resource values found in the subunit. The summary is based on information from various resource reports prepared for the plan (see appendices C and D).

The *Land Use Designation Summary* chart for this subunit provides a quick picture of planned uses for the subunit. For a complete description of management policy, the chart must be used with the statement of management intent and the management guidelines.

Coastal Plans. Navigable rivers within the Northwest Arctic Borough Coastal Management Plan (CMP) will be managed consistent with the coastal management program. The CMP has identified three Important Resource Areas and four Sensitive Use Areas in this management unit. These are listed below and are shown on

the maps in Appendix J. These areas have special policies for subsistence which apply through the CMP.

Important Resource Areas

North Fork Squirrel River/Omar River
Salmon River
Selawik/Hunt/Redstone Rivers Caribou
Migration Corridor

Sensitive Use Areas

Onion Portage
Selawik River Sheefish/Whitefish Spawning
Area
Noatak River Chum Salmon Spawning Area
Kobuk River Sheefish/Whitefish Spawning
and Use Area

Management Guidelines

General. The complete set of areawide guidelines is presented in Chapter 2. The *Resource Information Summary* charts for this unit identify important trails, known or probable heritage sites, and other resource values in specific subunits that are addressed by the appropriate guidelines in Chapter 2. Any of the Chapter 2 guidelines could apply to certain uses within this management unit. Those that are most likely to apply are:

Coordination and public notice
Fish and wildlife habitat
Heritage resources
Materials
Public and commercial recreation Transportation and utilities

RESOURCE INFORMATION SUMMARY

Management Unit 7: Remnant Rivers

RESOURCE	Kobuk and Noatak rivers
----------	-------------------------

Fire Protection	N/A
Fish and Wildlife	A2: black bear, caribou, moose, waterfowl, anadromous and resident fish, and small game.
Forestry	N/A
Heritage Resources	Known cultural values at Onion Portage.
Important Trails	Kotzebue - Shungnak trail along Kobuk.
Minerals	Low to moderate
Oil & Gas	Unknown
Public Access	Wheeled and floatplane along lower Kobuk and Noatak; scattered plane access elsewhere.
Recreation	Camping and floating; nationally known recreation rivers.
Reindeer Grazing	N/A
Settlement Suitability	N/A
Subsistence	Subsistence use in this unit has been documented by studies of the DF&G, Subsistence Division, for the communities of Ambler, Anaktuvuk, Buckland, Kiana, Kivalina, Kobuk, Noatak, Noorvik, Selawik, and Shungnak. Subsistence use by other communities—such as Deering and Kotzebue—is known to exist, but the extent of their use has not been documented in studies for the NWAP.

See Appendix C for a list of reports with more detailed information, and Appendix D for definition of ratings.

LAND-USE DESIGNATION SUMMARY

MANAGEMENT UNIT 7 - REMNANT RIVERS

SUBUNIT	LAND USE DESIGNATIONS			COMMENTS
	PRIMARY SURFACE USE ¹	PROHIBITED SURFACE USE ²	SUBSURFACE ³	
Kobuk and Noatak rivers	Habitat and harvest/ Recreation lands	Remote cabins Commercial rec. leasing in some areas	Open, except at sheefish spawning areas	No map is included for this management unit.

¹Secondary uses include: none identified.

²Other uses such as material sales, land leases, or permits, that are not specifically prohibited may be allowed. Such uses will be allowed if consistent with the management intent statement, the management guidelines of this unit, and the relevant management guidelines listed in Chapter 2.

³All areas are available for leasing for leasable minerals. Statements of whether or not the unit is open to mineral entry refer only to locatable minerals. See glossary in Appendix A for definitions of leasable and locatable minerals. See Appendix H for detailed descriptions of areas closed to mineral entry.

CHAPTER 4

Implementation

	page
Introduction.....	4-1
Proposed State Land Selections	4-1
Land Use Classifications	4-2
Mineral Orders	4-5
Municipal Entitlement	4-5
Procedures for Plan Modification and Amendment	4-6
Recommendations for Further Study.....	4-7
Recommendations for Field Staff and Enforcement	4-7
Recommendations for Cooperative Agreements.....	4-8
Recommendations for Additional Access.....	4-8
Public Trust Doctrine.....	4-9



Ambler River, looking north

Chapter 4

IMPLEMENTATION

Introduction

This chapter discusses specific actions needed to implement the plan. These actions include proposed land selections, classifications, mineral orders, municipal entitlements, and procedures for plan amendment. This chapter also includes recommendations for further study, field staff, cooperative agreements, and additional access. It also describes the public trust doctrine.

Proposed State Land Selections

This plan identifies areas for future state land selections. Recommendations and reasons for proposing these selections are described below. In general, lands are proposed for selection either to consolidate state land ownership and improve the efficiency of state land management, or because the land has high resource values that merit state management. The selections are shown on the management unit maps in Chapter 3 and on Map 4.1 in this chapter. No relinquishments are proposed.

The state is entitled to select additional lands from vacant, unappropriated, and unreserved federal lands. In the Northwest Area, there are over six million acres that the state could select. Most of this land is in five general areas: the Squirrel River drainage, south of the Kobuk River, east of Buckland, the central Seward Peninsula, and along eastern Norton Sound. Most of these lands have low surface and subsurface resource values and are not desirable for state selection. However, some lands with high resource values or strategic locations merit state selection. Almost 500,000 acres in 14 parcels are recommended for selection. Some of these parcels have already been selected by Native corporations. If the state top-files (files a selection on Native-selected land), the state selection would be valid only if the Native selection were relinquished or rejected.

The total amount of additional land the state may select is limited. Therefore, the Department of Natural Resources (DNR) will determine additional lands to be selected in the Northwest Area through a statewide process that will evaluate proposed selections relative to opportunities for additional selections throughout the state.

Parcels proposed for selection are listed below, with their approximate acreage, the reason for selection, and the unit in which they are located. The subunit designations are shown on the management unit maps, and descriptions in Chapter 3 state the management intent for these lands if they are conveyed to state ownership.

Lisburne Peninsula (Units 1 and 2). The plan recommends selecting several parcels totalling about 100,000 acres on the Lisburne Peninsula. These lands should be selected for their high mineral, coal, or oil and gas potential, and to consolidate land ownership patterns. The state should also determine if any other lands are available for selection as a result of recent land exchanges between the Arctic Slope Regional Corporation and the federal Bureau of Land Management (BLM). As a result of these exchanges, land with mineral or oil and gas potential may have been transferred back to BLM ownership. Also, one small parcel in Unit 2 is selected near the coast, south of Kivalina to consolidate land ownership.

Kobuk River (Unit 3). Two parcels east of Ambler, about 90,000 acres, should be top-filed over existing Native selections. Top-filing would consolidate ownership if the land is not conveyed to the Native corporation. These areas have high mineral, habitat, and human use values.

Seward Peninsula (Units 2, 4, and 6). The plan recommends selections in four areas on the Seward Peninsula: near the western tip of the peninsula, for mineral values and to consolidate

land ownership; along the north end of the Teller Road, because of accessibility, mineral values, grazing potential, and to consolidate land ownership; in the Mt. Osborn area near the Kougarok Road, because of high mineral values, high public recreation values, and accessibility; and in the middle Koyuk River, because of mineral, wildlife, access, subsistence, and recreation values. These selections contain about 270,000 acres in Unit 4 and about 95,000 acres in Unit 6. A small parcel (1,280 acres) is also selected in the southern part of Unit 2 to top-file on Native selections along the Buckland River southeast of Buckland. This selection would provide access and consolidate land ownership if the land is not conveyed to Native ownership.

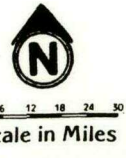
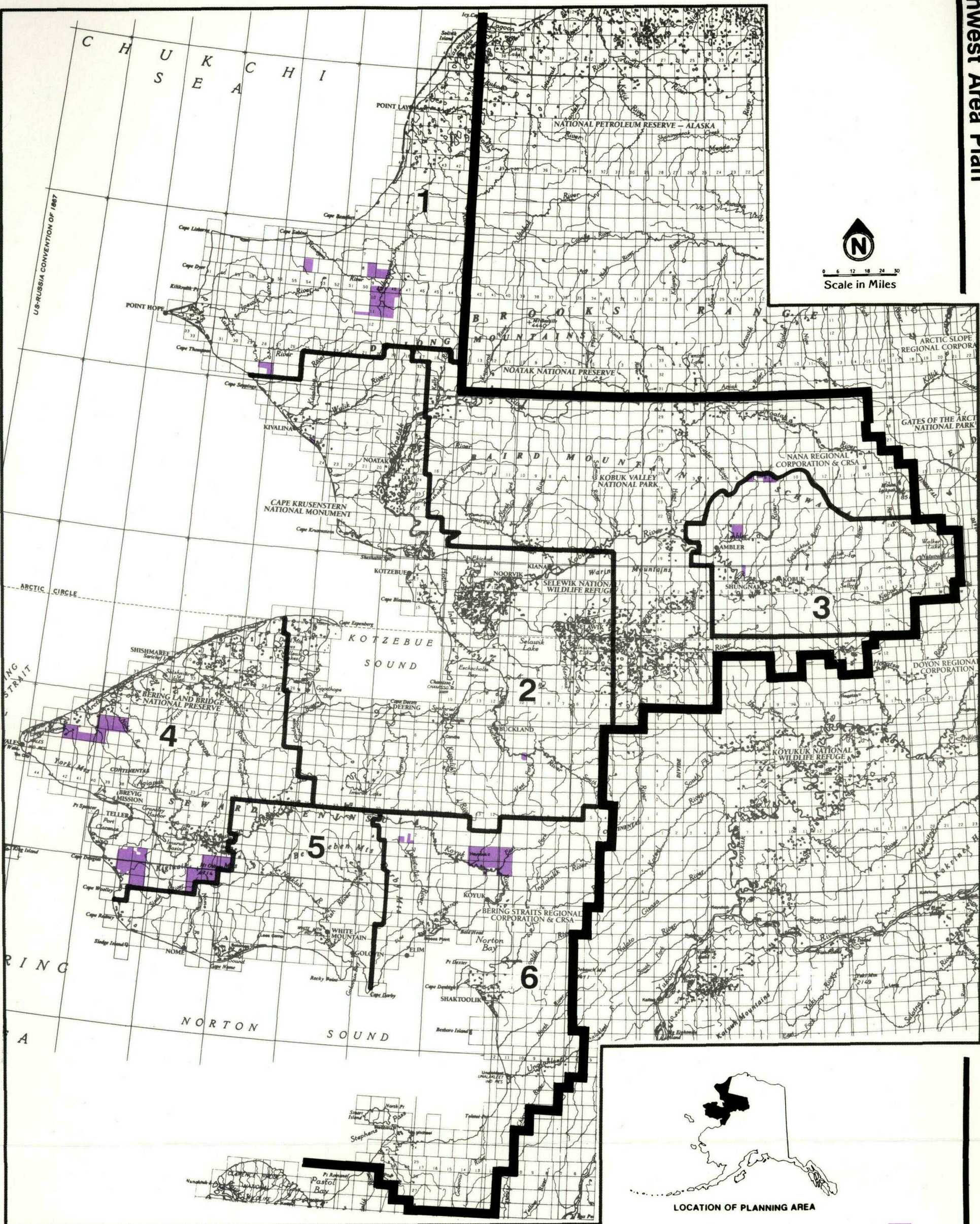
Land Use Classifications

This plan establishes primary and secondary land use designations for state land in the Northwest Area. To implement the plan on state land, DNR must classify land into the classification categories in 11 AAC 55 in a way that reflects the plan intent. Land classifications are recorded on state status plats, and are the formal record of the primary uses for which each parcel of state land will be managed. The plan serves as the final finding by the Commissioner of DNR for land classifications for state land in the Northwest planning area. The primary surface land use designations in Chapter 3 will be converted to classifications shown in Table 4.1 (see Appendix G for acreages).

Table 4.1 Conversion of Primary Use Designations to Classifications

Primary Use Designations	Classifications
Coal/Habitat and harvest lands	Coal Land, Wildlife Habitat Land
General use tidelands	Resource Management Land
General use uplands	Resource Management Land
Habitat and harvest tidelands	Wildlife Habitat Land
Habitat and harvest uplands	Wildlife Habitat Land
Habitat and harvest/Recreation lands	Public Recreation Land, Wildlife Habitat Land
Mineral lands	Mineral Land
Minerals/Habitat and harvest lands	Mineral Land, Wildlife Habitat Land*
Settlement	Settlement

*For Subunit 2c, the designation for the Kugruk River area, including Chicago Creek, will be classified to include Coal Land.



- Areas recommended for state selection
- MANAGEMENT UNIT BOUNDARY
- AREA PLAN BOUNDARY

SUMMARY OF
NEW SELECTIONS

Mineral Orders

This plan identifies areas that will be open and closed to new mineral entry. To implement closure decisions, mineral closing orders were prepared by DNR and signed by the commissioner. The final finding for these orders is in Appendix H, *Mineral Orders for the Northwest Area Plan*.

Municipal Entitlement

Municipal Entitlement. The Municipal Entitlement Act (AS 29.65) establishes state land classification categories that determine a municipality's general grant land entitlement and that are available for transfer to a municipality. Under existing laws, the size of a municipality's entitlement is ten percent of the vacant, unappropriated, unreserved (VUU) land in the municipal boundaries, not to exceed 20 acres per capita. In the Northwest Area, there is abundant land in the VUU categories. Entitlement will probably be limited by population rather than by land classification.

Classification. The Northwest Area Plan has proposed classifications for the state lands within the planning area boundaries (see *Land Use Classifications* in this chapter). Classifications have been based on the best information available during the planning process at the scale appropriate to the planning effort, generally 1:250,000. These classifications are broad and have not taken into account future transfer of land to municipalities. Much land is classified in categories not available for transfer, such as Wildlife Habitat Land and Mineral Land. However, settlement of municipal entitlements is a high priority of the department and current classifications will not preclude considering of parcels of land for reclassification and transfer to a municipality.

When a municipality incorporates under state law, it may select state land within its boundaries that, except for classification, otherwise meets the definition of vacant, unappropriated, unreserved land under AS 29.65. When such lands are selected, DNR and the Department of Fish and Game will do a more detailed, site-specific analysis of the resource values. This analysis may

result in changing a classification to one that is available for transfer. Changes in designations and classifications will require plan amendment and reclassification before the selection is approved.

For example, river corridor lands that are classified Wildlife Habitat/Public Recreation are not available for transfer. A more detailed review of habitat values may show that parts of the corridor are suitable for local management either because the resource values do not merit state retention or because the land is not essential to the overall management intent for the area. Where this is the case, reclassification of part of the land may be recommended to allow for land transfer. Transfer to a municipality will not be approved until the recommended changes have been publicly reviewed through the amendment and reclassification processes.

Existing Boroughs. The Northwest Arctic Borough was established in 1986, one year after the beginning of the Northwest Area Plan. The borough did not want the Northwest Area Plan to restrict its municipal entitlements. The borough is currently identifying state land areas of interest for municipal selection. The borough will review its interest areas with borough residents and submit final selections to DNR by January 1990. Additionally, the 1987 amendments to the municipal entitlement act allow the North Slope Borough to select 89,000 acres from state lands within its boundary. To facilitate the transfer of lands to the boroughs, DNR will defer classification of preliminary areas of interest for the Northwest Arctic Borough selection (approximately 450,000 acres), and for the North Slope Borough (approximately 160,000 acres), until the borough selections are formally submitted. Until that time, preliminary interest areas will be managed in accordance with the policies, guidelines, and management intent described in the Northwest Area Plan. Following receipt of the formal selections, lands not selected by the borough will be classified according to the plan designations in the management units and as listed in Chapter 4, *Land Use Classifications*. If the borough selection process is extended, the classification of the preliminary interest areas should also be extended.

State Interests. As with all municipal selections, formal borough selections will be reviewed for state interests, with public notice, prior to conveyance.

Procedures for Plan Modification and Amendment

The land use designations, policies, implementation actions, and management guidelines of this plan may be changed if conditions warrant. The plan will be updated periodically as new data and new technologies become available, and as changing social or economic conditions place different demands on state land.

Periodic Review. The plan will be reviewed by the Northwest Area Planning team at least once every five years to determine if revisions are necessary. The plan review may include public meetings open to all interested groups and the general public. In addition, DNR will consult the planning team each year to determine whether a meeting should be held to address new information, new conditions, or plan implementation.

The Northwest Arctic Borough is beginning to work on its local comprehensive plan. When the comprehensive plan is completed and adopted, DNR will comply with the provisions of the plan consistent with the state interest. The periodic or annual review should address changes necessary to the Northwest Area Plan as a result of the borough's comprehensive plan.

Changes to the Plan. The method for changing the plan depends on the type of change required. There are three types of changes possible to a plan: amendments, special exceptions, and minor changes. Amendments and special exceptions are plan revisions subject to the planning process requirements of AS 38.04.065; minor changes are not. The Director of the Division of Land and Water Management (DLWM) determines whether a proposed change constitutes an amendment, a special exception, or a minor change. Changes to the plan may be proposed by agencies, municipalities, or members of the public. Requests for changes are submitted to the Northern Regional Office of the DLWM in Fairbanks.

Amendments. An amendment permanently changes the plan by adding to, or modifying, its basic intent. Changes in allowed uses, prohibited uses, policies, guidelines, and some implementation actions constitute amendments. For example, an amendment may close to new mineral entry an area that the plan designated to be open, allow a land use in an area where the plan prohibited it, or allow land to be opened to homestead entry in an area the plan designated for retention in public ownership. Plan amendments must be approved by the Commissioner of DNR.

Special Exceptions. A special exception does not permanently change the provisions of the plan, and cannot be used as the basis for a reclassification of the subunit. Instead, it allows a one-time, limited-purpose variance of the plan's provisions, without changing the plan's general management intent or guidelines. For example, a special exception may be used to grant an eligible applicant a preference right under AS 38.05.035 in a subunit designated for retention in public ownership. Special exceptions may be made if complying with the plan would be excessively difficult or impractical, or if it would be inequitable to a third party, and if the purposes and spirit of the plan can be achieved despite the exception. Special exceptions may be approved by the Regional Manager of the DLWM. The Regional Manager's decision may be appealed to the Director of DLWM, and the Director's decision may be appealed to the Commissioner of DNR.

Amendments and special exceptions must be accompanied by a written finding that explains the new information or new conditions that warrant the revision, describes the alternative course of action and the reasons for it, and includes inter-agency review and public notice of the proposed revision. This finding may be incorporated under AS 38.05.035. Plan revisions may require public meetings if the Commissioner decides that the level of controversy warrants it.

Minor Changes. A minor change does not modify or change the basic intent of the plan. Minor changes may be necessary to clarify, make consistent, facilitate implementation, or make technical corrections. Minor changes are made at the discretion of the Director of DLWM and do not require public review. The director will notify

planning team representatives when minor changes are made. Affected agencies will have the opportunity to comment on minor changes following notification; the comment period may be provided through existing interagency review processes for associated actions. If the agencies disagree with the Regional Manager's decision, the decision may be appealed to the Director of DLWM, and the Director's decision may be appealed to the Commissioner of DNR.

Recommendations for Further Study

DNR Statewide Goals. Several of the statewide goals for DNR implicitly include subsistence activities and traditional uses. However, the goals do not clearly address the importance of these activities. When the statewide plan is updated, the DNR goals should be revised to clarify that subsistence activities and traditional uses are part of the goals for which state lands are managed.

Remote Cabin and Settlement Programs. Historically, settlement in remote areas has been either concentrated near communities or dispersed over wide areas. State disposal programs in remote areas offer neither choice. Because of ANCSA village selections, little state land exists near communities. Survey costs concentrate parcels in relatively small areas (1 to 4 townships). There is also little economic opportunity in disposal areas, and existing activities (trapping, hunting, fishing, guiding) may be threatened by the influx of new residents.

Demand for dispersed, accessible cabin sites exists in the Northwest Area, particularly from Nome residents. The public did not support the remote cabin permit program, because the term of the permit did not offer long-term ownership or title transfer, and because remote cabin sites must be ten miles from any road.

The department should review existing land sale and remote cabin permit programs to determine how the programs can better meet the needs of rural Alaska. DNR should recommend appropriate changes to the legislature, and adopt regulations to implement the changes.

Kobuk River Study. Agencies with jurisdiction along the Kobuk River corridor should develop recommendations for management of lands in the Kobuk River area. Detailed information about the economics of subsistence and recreation in the river corridor, the impacts of the various uses, and the management options available to address the issues should be considered. The river management study should be as specific as possible in its focus, and limit the issues addressed. Direction for management of state land in the Kobuk River area has already been addressed in the plan for grazing, agriculture, oil and gas leasing, mineral closures, remote cabins, and land disposals. The river management study should address, at a minimum, the following issues:

- Conflicts among uses of the river, particularly management objectives and guidelines for subsistence activities/traditional use and recreation use in the Kobuk River corridor.
- Roles of different land owners in providing land for these uses.
- Provision for, and maintenance of, public access sites, easements, and campsites.
- Identification of, and proposed solutions to, trespass problems.
- Identification and management of cultural resource sites.
- Recommendations for any land exchanges or administrative or legislative designations.

The study should be initiated within five years after adoption of the Northwest Area Plan, or after completion of the Northwest Arctic Borough's Comprehensive Plan, whichever comes first.

Recommendations for Field Staff and Enforcement

This plan emphasizes multiple use. The plan relies on existing laws, regulations, and new guidelines to make as many uses compatible as possible. To ensure that these measures are effective, and to develop public confidence in the

state's ability to manage for multiple use, the laws, regulations, and guidelines must be enforced. Examples of actions likely to require fieldwork, monitoring, and enforcement include land sales, remote cabin permits, trapping cabin permits, leases for commercial recreation facilities, materials sales, and mining permits and leases.

DNR will take appropriate action against unauthorized uses of state land. Priorities for such action will be determined by the availability of funding and the severity of the impact of the unauthorized use on public uses, on public access, or on significant settlement activities on state land.

DNR places a high priority on monitoring and enforcing compliance with stipulations on leases, permits, and sales, and on taking action against unauthorized activities where these activities have a high probability of creating significant negative impacts to other important resources or uses. Field staffing and funding are currently inadequate to enforce the laws and guidelines on all 11 million acres of state land in the planning area. DNR's ability to enforce will depend on its budget. The department's budget requests will continue to reflect these priorities for monitoring and enforcement. The plan recommends that additional funds be dedicated to enforcement activities to support implementation of the new and continuing land management programs in the Northwest Area.

Recommendations for Cooperative Agreements

Grazing Permits. Grazing operations plans should become an essential component of grazing authorizations. Plans will be coordinated by the Alaska Soil and Water Conservation District through a cooperative effort among the applicant (herder) and affected land owners. Technical Assistance will be provided by the U.S. Soil Conservation Service. The complex land ownership pattern that exists in Northwest Alaska necessitates establishing a coordinated grazing permit application process involving the various affected land owners. The grazing operations plans should improve management of reindeer herding, and the coordinated application process

should simplify the management requirements of the herder and land owners.

Shelter Cabins. A system of shelter cabins should be established for public, non-profit use, in cooperation with federal and municipal governments. The need for emergency shelter or warm, dry lodging while traveling cross-country is well established in Northwest Alaska. Although state land is available for shelter cabins, funds and staff to implement such a construction program are not currently available. Cooperation will be sought with municipal or federal governments, Native corporations, or nonprofit organizations for construction and management of shelter cabins.

Recommendations for Additional Access

Easement atlases of existing legal access have been drafted to document legal access, help minimize trespass, and identify where additional access is needed to ensure future use of valuable resources on state land. The *Kotzebue Area Easement Atlas* is currently available, and the *Nome Area Easement Atlas* will be available in 1989.

Maps of existing legal access were reviewed to determine where additional access is needed to ensure future use of valuable resources on state lands. Of particular concern are areas with moderate to high surface and subsurface values on state-owned and state-selected lands, proposed land sale areas, and access to important habitat and harvest areas. In addition, protection of existing transportation routes between communities is a goal of the plan. In general, no additional access is needed at this time where there are existing or previously proposed 17(b) easements, state omnibus roads, navigable rivers, or trails across public lands. Areas needing additional legal access are listed below. No potential RS2477 rights-of-way have been identified for validation at this time to implement this plan. However, these recommendations for additional access do not affect the validity of RS2477s in the planning area in the future.

Additional legal access can be established in a variety of ways, including acquiring access or relocating existing 17(b) easements. The best

technique will vary from site to site and can be identified only through more detailed examination of individual sites. The list below identifies only the need for additional access, not the technique for providing it or the description of detailed routes.

Transportation Corridors. Three possible transportation corridors have been identified in the Northwest Area: the Western Access Corridor from Prospect to the Kougarok Road, the Chicago Creek coal-mining area to Kotzebue route, and the Northern Access Corridor to the Lik mineral deposit. No applications have been made for any of these routes. They are not being proposed for construction, but authorization for activities that could foreclose options for future development of these corridors should not be granted.

Overlapping State and Native Selections. Appropriate easements should be reserved when areas of overlapping state and Native selections are conveyed to Native ownership. The following are areas of particular interest for review: selections around Nome for access to mineral, recreation, and subsistence areas; selections affecting the proposed land sale areas at Kolliksak Lake and the Mauneluk River; and all areas used for intercommunity travel routes.

Ear Mountain. Existing legal access for the Ear Mountain area should be extended to state land along the American River Trail.

Granite Mountain. Existing legal access to Granite Mountain should be extended to state land from the Koyuk River.

Access concerns for other areas are addressed generally in Chapter 2 guidelines under *Transportation and Utilities*, *Trail Management*, and *Public Access* sections, and for specific existing trails or public access in Chapter 3 management units.

Public Trust Doctrine

Under the Alaska Constitution, the state has special duties and management constraints with respect to state-owned land underlying navigable waters. The Alaska Constitution contains

provisions embracing the principles commonly known as the public trust doctrine. That doctrine, as it has evolved in court decisions over hundreds of years, requires the state to exercise authority to insure that the paramount rights of the public to use navigable waters for navigation, commerce, recreation, and related purposes is not substantially impaired.

The Alaska Constitution (Article VIII, sections 1, 2, 3, 6, 13, and 14) and Alaska Statutes (38.05.127 and 38.05.128) are the legal basis for applying the public trust doctrine in Alaska. This doctrine guarantees the public right to engage in such things as commerce, navigation, fishing, hunting, swimming, and protection of areas for ecological study.

The Constitution provides that "free access to the navigable or public waters of the state, as defined by the legislature, shall not be denied any citizen of the United States or resident of the state, except that the legislature may by general law regulate and limit such access for other beneficial uses or public purposes." Eliminating private upland owners' reasonable access to navigable waters may result in compensation.

Because 99 percent of Alaska was in public ownership at statehood, both federal and state laws providing for the transfer of land to private parties also provide for public access to navigable waters. Implementing the state constitutional guarantee of access to navigable waters under Article VII, Section 14, AS 38.05.127 requires that the state commissioner of natural resources must "provide for the specific easements or rights-of-way necessary to ensure free access to and along the body of water, unless the commissioner finds that regulating or eliminating access is necessary for other beneficial uses or public purposes."

It has never been held that any lands normally subject to the public trust doctrine in Alaska are exempt from it, including land occupied and developed.

These statutes and concepts are considered and used throughout this plan. Any management actions shall be consistent with the public trust doctrine as defined by the Alaska Constitution, statutes, court decisions, and public involvement.

APPENDICES

	page
Appendix A	Glossary..... A-1
Appendix B	Community Notice List By Management Unit..... B-1
Appendix C	Publications Related to the Area Plan (References)..... C-1
Appendix D	Criteria Used for the Chapter 3 Summary Charts..... D-1
Appendix E	Summary of Leases and Permits by Management Unit..... E-1
Appendix F	1985 Population of Communities within the Northwest Planning Area..... F-1
Appendix G	Designations and Approximate Acreage by Subunit..... G-1
Appendix H	Mineral Orders for the Northwest Area Plan..... H-1
Appendix I	Listing of Key Agencies and Phone Numbers..... I-1
Appendix J	Coastal Plan Boundaries..... J-1
Appendix K	U.S.G.S. 1:250,000 Quadrangle Map Index..... K-1
Appendix L	Index..... L-1



Basin Creek, north of Nome

Appendix A

GLOSSARY

AAC: Alaska Administrative Code.

ACMP: Alaska Coastal Management Plan.

ADF&G: Alaska Department of Fish and Game.

AHRS: Alaska Heritage Resource Survey.

ANCSA: Alaska Native Claims Settlement Act.

AS: Alaska Statute.

Affected Agencies or Appropriate Agencies: Includes state or federal agencies and coastal districts that may be affected by a decision or action.

Anadromous Fish: Fish ascending rivers from the sea for breeding.

Anadromous Fish Stream: A stream determined by ADF&G to be important fish habitat as recorded in An Atlas to the Catalog of Waters Important for the Spawning, Rearing, or Migration of Anadromous Fishes.

BLM: Bureau of Land Management, U.S. Department of the Interior.

Closed to Mineral Entry: Areas where the staking of new mineral claims is prohibited because mining has been determined to be in conflict with significant surface uses in the area. Valid existing mineral claims at the time of plan adoption are not affected by mineral closures.

Consultation: Under existing statutes, regulations, and procedures, the Department of Natural Resources informs other groups of its intention to take a specific action and seek their advice or assistance. Consultation is not intended to be binding on a decision. It is a means of informing affected organizations and individuals about forthcoming decisions and benefitting from their expertise. For coastal districts, consultation should be used to alert DNR to appropriate coastal plan policies affecting the proposed action. DNR replies to parties offering advice or assistance by sending them the decision and the reasons for which the decision was made,

or by notifying them that the decision and findings are available for request.

DEC: Alaska Department of Environmental Conservation.

DLWM: Division of Land and Water Management, Alaska Department of Natural Resources.

DNR: Alaska Department of Natural Resources.

DOG: Division of Oil and Gas, Alaska Department of Natural Resources.

DOA: Division of Agriculture, Alaska Department of Natural Resources.

DOF: Division of Forestry, Alaska Department of Natural Resources.

DPOR: Division of Parks and Outdoor Recreation, Alaska Department of Natural Resources.

DOT&PF: Department of Transportation and Public Facilities.

Director: The Director of the state division responsible for managing state land. For lands administered by DLWM, the director refers to the Director of DLWM.

Easement: The right to use privately owned land for a particular purpose (see also 17(b) easements).

17(b) Easements: Easements across Native corporation land reserved through the Alaska Native Claims Settlement Act (ANCSA). Uses of the easements are limited to transportation purposes and other uses specified in the act and in conveyance documents.

Feasible and Prudent: Consistent with sound engineering practice and not causing environmental, social, or economic problems that outweigh the public benefit to be derived from compliance with the guideline.

Feasible: Capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, technical, and safety factors.

Fish and Wildlife Habitat and Harvest: The fish and wildlife habitat and harvest designations used in the Northwest Area Plan resource inventory are described below. These were developed by the Alaska Department of Fish and Game (DF&G) for the Fish and Wildlife Element.

- **A-1 Habitat lands.** A discrete habitat needed to sustain a species within a region. These are highly sensitive fish and wildlife habitat and human use areas. A-1 Habitat lands include the seabird rookeries, mouths of anadromous fish streams and enclosed estuaries, marine mammal haul-outs, and Kobuk River sheefish spawning beds. DF&G recommends wildlife be the primary use of these areas with possible limited seasonal entry of some uses.
- **A-2 Habitat lands.** Habitats with fish and wildlife and related human use values of regional or statewide significance. The potential for reducing these values due to impacts from other uses is considered high and, in most instances, unavoidable. These areas include the most intensive or highest quality public-use areas or the most productive fish and wildlife habitats. DF&G recommends that wildlife be the primary use with only compatible (secondary use) activities allowed.
- **B-1 Habitat lands.** Habitats with fish and wildlife and related human-use values that are less sensitive to disturbance than A1 or A2 habitat lands. Compatibility of the habitat with other public resources is reasonably high. DF&G recommends wildlife be a co-primary use and the area be subject to relatively restrictive management.
- **B-2 Habitat lands.** Moderate value habitat or harvest areas. In this designation, ADF&G recommends that habitat be a co-primary use with some secondary uses allowed if compatible. Allowable secondary uses would include disposals of interest in state land if the disposal would not preclude fish and wildlife or that no feasible alternatives to disposal or long term commitment to development of these valuable public lands

are available to meet established economic, social, or environmental resource needs of the state.

- **C Habitat lands.** ADF&G has determined that fish and wildlife habitat values are low and can be protected primarily through development of guidelines.

Goal: A statement of basic intent or a general condition desired in the long term. Goals usually are not quantifiable and do not have specified dates for achievement.

Guideline: A specific course of action that must be followed when a resource manager permits, leases, or otherwise authorizes use of state lands. Some guidelines state the intent that must be followed and allow flexibility in achieving it. Guidelines also range from giving general guidance for decision making or identifying factors to be considered, to setting detailed standards for on-the-ground decisions.

Heritage Resources: Historic, prehistoric and archaeological sites, locations, and remains pertaining to the historical or prehistorical culture of people in the state and the natural history of the state.

High: A rating given a geographical unit within the study area that indicates the relative value of a resource is high compared with other units in the study area.

INHTS: Iditarod National Historic Trail System.

IRA and Traditional Village Councils: The federal 1934 Indian Reorganization Act (IRA) established a mechanism for Native villages to incorporate and elect councils (IRA councils) to represent villages when dealing with the federal government. In the absence of an IRA council, the federal government also recognizes Traditional Village Councils as a governing body for those in the community who have traditionally recognized that form of governmental representation.

KRM: Kateel River Meridian.

LADS: Land Availability Determination System; a three year process that precedes a land disposal.

Land Offerings: Transfer of state land to private ownership as authorized by AS 38.04.010, including fee-simple sale, homesteading, and sale of

agricultural rights; they do not include leases, land-use permits, water rights, rights-of-way, material sales, or other disposals of interest in lands or waters.

Land Sales or Land Disposals: Same meaning as "Land Offerings."

Leasable Mineral: Leasable minerals include deposits of coal, sulfur phosphates, oil shale, sodium, potassium, oil, and gas.

Leasehold Location: See "Mineral Lease."

Livestock: Animals raised primarily for the purpose of marketing products or for human consumption.

Locatable Mineral: Locatable minerals include both metallic (gold, silver, lead, etc.) and non-metallic (fluorspar, asbestos, mica, etc.) minerals.

Low: A rating given a geographical unit within the study area that indicates the relative value of a resource is low compared with other units in the study area.

MLUP: Miscellaneous land use permit, issued by the Alaska Department of Natural Resources.

Management Intent Statements: The statements that define the department's near- and long-term management objectives and the methods to achieve those objectives.

Materials: "Materials" include common varieties of sand, gravel, rock, peat, pumice, pumicite, cinders, clay, and sod.

Mineral Lease: An exclusive property right to develop and mine deposits of "locatable minerals" (see definition for locatable mineral). Rights to locatable minerals on uplands owned by the State of Alaska are obtained by making a mineral discovery, staking the boundaries of the location, and recording a certificate of location. In most areas, such a location is a "mining claim," which gives the owner an immediate property right to mine deposits. However, in areas of the plan that have been restricted to leasing, the location is a "leasehold location," not a mining claim. The leasehold location must be converted to an upland mining lease before mining begins. In unrestricted areas, locators may convert their mining claims to leases if they wish.

Mining Location, Mining Claim, and Leasehold Location: The property right to possess and ex-

tract all locatable minerals within the boundaries of the location. This right is acquired by discovery, location, and filing in accordance with the legal requirements of the Alaska Statutes and the Alaska Administrative Code which apply to locatable minerals. The term "mining location" also applies to a prospecting site which does not require a discovery, is acquired by location and filing, and remains in effect for one year (also see "leasehold location").

Moderate: A rating given a geographical unit within the study area that indicates the relative value of a resource is moderate compared with other units in the study area.

Mouth of Anadromous Stream: The first-order stream mouth with salt water.

NPS: National Park Service, U.S. Department of the Interior.

NWAP: Northwest Area Plan.

Native Owned: Land that is patented or will be patented to a Native corporation.

Native Selected: Land that is selected from the federal government by a Native corporation but not yet patented.

Navigable: Used in its legal context, this refers to lakes and rivers that meet federal and state criteria for navigability. Under the Equal Footing Doctrine, the Alaska Statehood Act, and the Submerged Lands Act, the state owns land under navigable waterbodies.

Policy: An intended course of action or a principle for guiding actions. In this plan, DNR policies for land and resource management include goals, management intent statements, management guidelines, land use designations, implementation plans and procedures, and various other statements of DNR's intentions.

Primary Use: A designated, allowed use of major importance in a particular management unit. Resources in the unit will be managed to encourage, develop, or protect this use. Where a management unit has two or more designated primary uses, the management intent statement and guidelines for the unit, together with existing regulations and procedures, will direct how resources are managed to avoid or minimize conflict between these primary uses.

Prohibited Use: A use not allowed in a management unit because of conflicts with management intent, designated primary or secondary uses, or management guidelines. Uses not specifically prohibited nor designated as primary or secondary uses in a management unit are allowed if compatible with primary and secondary uses, the management intent statements for the unit, and the plan's guidelines.

Public Trust: A doctrine that requires the state to manage tidelands, shorelands, and submerged lands for the benefit of the people, so that they can engage in such things as commerce, navigation, fishing, hunting, swimming, and ecological study.

RS 2477: An historic federal statute, repealed in 1976, that granted transportation rights-of-way on unappropriated and unreserved federal land. These rights-of-way are established by public use or construction.

Remote Cabin: A cabin constructed under a permit issued through the Remote Cabin Permit program, authorized in AS 38.04.079 and further described in 11 AAC 67.700-.790.

Riparian: Relating to, living, or located on the bank of a river.

SCS: Soil Conservation Service, U.S. Department of Agriculture.

Secondary Use: A designated, allowed use considered important, but intended to receive less emphasis than a primary use because it has less potential than a primary use or contributes less to achieving the management intent of the unit than a primary use, or occurs only on limited sites. In those site-specific situations where a secondary use has a higher value than a primary use, the secondary use may take precedence over the primary use. Management for a secondary use will recognize and protect primary uses through application of guidelines, regulations, and procedures. However, if a secondary use cannot occur without detrimentally affecting a primary use in the management unit as a whole, the secondary use will not be allowed.

Shall: Requires a course of action or a set of conditions to be achieved. A guideline modified by the word "shall" must be followed by resource managers or users. If such a guideline is not com-

plied with, a written decision justifying the non-compliance is required.

Shorelands: State-owned lands beneath navigable waters.

Shoreline Development: Any water dependent or water related structure of facility that is permanent or used for private, public, commercial, or industrial purposes, or both. "Shoreline development" excludes log or resource transfer facilities, log storage, A-frame logging, mine tailings disposal areas, or camps and other resource development support facilities associated with forestry or mineral development.

Should: States intent for a course of action or set of conditions to be achieved. A guideline modified by the word "should" states the plan's intent and allows a resource manager to use discretion in deciding the specific means for best achieving the intent or whether particular circumstances justify deviation from the intended action or set of conditions. A guideline may include criteria for deciding if such a deviation is justified.

Significant Impact, Significant Effect, Significant Conflict, or Significant Loss (from ACMP statutes, AS 46.40.210): A use or an activity associated with that use, which proximately contributes to a material change or alteration in the natural or social characteristic of a part of state lands and in which

(a) the use or activity associated with it would have a net adverse effect on the quality of the resources on state land;

(b) the use or activity associated with it would limit the range of alternative uses of the resources on state lands; or

(c) the use would, of itself, constitute a tolerable change or alteration of the resources on state lands but which, cumulatively, would have an adverse effect.

Special Use Areas: All areas defined as Sensitive Use Areas and Important Resource Areas by the NANA Coastal Management Plan, and as Important Use Areas by the Bering Straits Coastal Management Plan.

State Omnibus Road: Road conveyed to the state by the Secretary of Commerce under the 1959 Alaska Omnibus Act.

State-Owned Land: Land that is patented or will be patented to the state.

State-Selected Land: Federal-owned land that is selected by the State of Alaska, but not yet patented.

Submerged Lands: In its legal context, "submerged lands" refers to those lands covered by tidal waters between the line of mean low water and seaward to a distance of three geographic miles or as may hereafter be properly claimed by the state. In this plan, the word "tidelands" refers to lands that are legally defined as "tidelands" or as "submerged lands." (See definition of "tidelands" and Figure 1-1 on Page 1-2.)

Subsistence: Subsistence is the customary and traditional use of natural resources for direct personal or family consumption as food, shelter, fuel, clothing, tools, or transportation; for the making and selling of handicraft articles; and for barter or sharing among subsistence users. Food gathering activities occur in a year-round cycle geared to the principal seasons of species occurrences, constrained at times by climate, terrain, and sea conditions.

Tidelands: In its legal context, "tidelands" refers to those lands periodically covered by tidal waters between mean high water and mean low water. However, in this plan, "tidelands" refers to all lands covered by tidal waters within jurisdiction of the state. In this plan, the word "tidelands"

refers to what is legally defined as "tidelands" or "submerged lands." (See Figure 1-1 on Page 1-2.)

Traditional Use: A use that has occurred and continues to occur either regularly or periodically.

Trapping (or Trapper) Cabin: A cabin constructed under a Trapping Cabin Construction Permit as authorized and described in AS 38.95.080 and 11 AAC 94.

UM: Umiat Meridian.

USDA: U.S. Department of Agriculture.

USF&WS: Fish and Wildlife Service, U.S. Department of the Interior.

Unknown: Resource data does not exist; therefore, resource values are unknown.

Unsuitable: When the land is physically incapable of supporting a particular type of resource development (usually because that resource does not exist), it is rated unsuitable.

Wetlands: Those areas inundated or saturated by subsurface or groundwater at a frequency and duration sufficient to support, and under normal circumstances that do support, a prevalence of vegetation adapted for life in saturated soil conditions.

Will: Same as "shall" (above).

Appendix B

COMMUNITY NOTICE LIST BY MANAGEMENT UNIT

Community notice will be sent, by letter, to the following organizations in accordance with Guideline C, *Coordination and Public Notice*, on page 2-5. Included are borough, village, and city councils; regional, village, and regional non-profit Native corporations; and federal land owners. The organizations are listed by management unit; notice will be sent according to the management unit in which the pending action is located. Addresses are shown for regional and federal organizations. For an updated mailing address for the community organizations, please consult with the following organizations:

	Contact these organizations	For these addresses
All Units:	Dept. of Community and Regional Affairs Nome Regional Office Nome, AK 99762 443-5457	City councils IRA councils
Unit 1:	North Slope Borough P.O. Box 69 Barrow, AK 99723 852-2611	Native corporations IRA councils
Unit 2:	Northwest Arctic Borough P.O. Box 1110 Kotzebue, AK 99752 442-2500	IRA councils
	NANA P.O. Box 49 Kotzebue, AK 99752 442-3301	Native corporations
Unit 3:	Same as Unit 2	
Unit 4:	Kawerak, Inc. P.O. Box 948 Nome, AK 99762 443-5231	IRA councils
	Bering Straits Native Corporation P.O. Box 1008 Nome, AK 99762 443-5252	Native corporations
Unit 5:	Same as Unit 4	
Unit 6:	Same as Unit 4	
Unit 7:	Same as Unit 2	

COMMUNITY NOTICE LIST BY MANAGEMENT UNIT**Management Unit 1. Lisburne**

<i>Community</i>	<i>Organization</i>
Ambler:	City of Ambler IRA Council for Ambler NANA Regional Corporation, Ambler Board Members
Buckland:	City of Buckland IRA Council for Buckland NANA Regional Corporation, Buckland Board Members
Deering:	City of Deering IRA Council for Deering NANA Regional Corporation, Deering Board Members
Kivalina:	City of Kivalina IRA Council for Kivalina NANA Regional Corporation, Kivalina Board Members
Kotzebue:	Northwest Arctic Borough - P.O. Box 1110, Kotzebue, AK 99752 NAB, Planning Commission, Chairman - P.O. Box 1110, Kotzebue, AK 99752 Selawik National Wildlife Refuge - P.O. Box 270, Kotzebue, AK 99752 Manillaq Association - P.O. Box 256, Kotzebue, AK 99752 USDI NPS Northwest Areas - P.O. Box 1029, Kotzebue, AK 99752 NANA Regional Corp., Director of Lands - P.O. Box 49, Kotzebue, AK 99752
Noatak:	City of Noatak Traditional Council for Noatak NANA Regional Corporation, Noatak Board Members
Noorvik:	City of Noorvik IRA Council for Noorvik NANA Regional Corporation, Noatak Board Members
Point Hope:	City of Point Hope Tigara Corporation
Point Lay:	IRA Council for Point Lay Cully Corporation
Other:	Alaska Maritime National Wildlife Refuge - 202 Pioneer Ave., Homer, AK 99603 Manillaq, Inc. - P.O. Box 256, Kotzebue, AK 99752 USDI Bureau of Land Management - 1150 University Ave., Fairbanks, AK 99709

Management Unit 2. Kotzebue Sound

<i>Community</i>	<i>Organization</i>
Ambler:	City of Ambler IRA Council for Ambler NANA Regional Corporation, Ambler Board Members
Buckland:	City of Buckland IRA Council for Buckland NANA Regional Corporation, Buckland Board Members
Deering:	City of Deering IRA Council for Deering NANA Regional Corporation, Deering Board Members
Kiana:	City of Kiana Traditional Council for Kiana NANA Regional Corporation, Kiana Board Members
Kivalina:	City of Kivalina IRA Council for Kivalina NANA Regional Corporation, Kivalina Board Members
Kobuk:	City of Kobuk Traditional Council for Kobuk NANA Regional Corporation, Kobuk Board Members
Kotzebue:	City of Kotzebue IRA Council for Kotzebue Kikiktagruk Inupiat Corporation NANA Regional Corporation, Kotzebue Board Members Northwest Arctic Borough - P.O. Box 1110, Kotzebue, AK 99752 NAB, Planning Commission, Chairman - P.O. Box 1110, Kotzebue, AK 99752 Selawik National Wildlife Refuge - P.O. Box 270, Kotzebue, AK 99752 Manillaq Association - P.O. Box 256, Kotzebue, AK 99752 USDI NPS Northwest Areas - P.O. Box 1029, Kotzebue, AK 99752
Noatak:	City of Noatak Traditional Council for Noatak NANA Regional Corporation, Noatak Board Members
Noorvik:	City of Noorvik IRA Council for Noorvik NANA Regional Corporation, Noatak Board Members
Selawik:	City of Selawik IRA Council for Selawik NANA Regional Corporation, Selawik Board Members
Shungnak:	City of Shungnak IRA Council for Shungnak NANA Regional Corporation, Shungnak Board Members

Management Unit 2. Kotzebue Sound (continued)

<i>Community</i>	<i>Organization</i>
Other:	Alaska Maritime National Wildlife Refuge - 202 Pioneer Ave., Homer, AK 99603 Maniilaq, Inc. - P.O. Box 256, Kotzebue, AK 99752 Reindeer Herders Association - P.O. Box 948, Nome, AK 99762 USDI Bureau of Land Management - 1150 University Ave., Fairbanks, AK 99709

Management Unit 3. Kobuk

<i>Community</i>	<i>Organization</i>
Ambler:	City of Ambler IRA Council for Ambler NANA Regional Corporation, Ambler Board Members
Buckland:	City of Buckland IRA Council for Buckland NANA Regional Corporation, Buckland Board Members
Kiana:	City of Kiana Traditional Council for Kiana NANA Regional Corporation, Kiana Board Members
Kobuk:	City of Kobuk Traditional Council for Kobuk NANA Regional Corporation, Kobuk Board Members
Kotzebue:	Northwest Arctic Borough - P.O. Box 1110, Kotzebue, AK 99752 NAB, Planning Commission, Chairman - P.O. Box 1110, Kotzebue, AK 99752 Selawik National Wildlife Refuge - P.O. Box 270, Kotzebue, AK 99752 Maniilaq Association - P.O. Box 256 Kotzebue, AK 99752 USDI NPS Northwest Areas - P.O. Box 1029, Kotzebue, AK 99752 NANA Regional Corp., Director of Lands - P.O. Box 49, Kotzebue, AK 99752
Noatak:	City of Noatak Traditional Council for Noatak NANA Regional Corporation, Noatak Board Members
Noorvik:	City of Noorvik IRA Council for Noorvik NANA Regional Corporation, Noatak Board Members
Selawik:	City of Selawik IRA Council for Selawik NANA Regional Corporation, Selawik Board Members
Shungnak:	City of Shungnak IRA Council for Shungnak NANA Regional Corporation, Shungnak Board Members

Management Unit 3. Kobuk (continued)

<i>Community</i>	<i>Organization</i>
Other:	Maniilaq, Inc. - P.O. Box 256, Kotzebue, AK 99752 USDI Bureau of Land Management - 1150 University Ave., Fairbanks, AK 99709 USDI NPS, Gates of the Arctic - P.O. Box 74680, Fairbanks, AK 99707

Management Unit 4. Northwest Seward Peninsula

<i>Community</i>	<i>Organization</i>
Brevig Mission:	Brevig Mission Native Corporation City of Brevig Mission Traditional Council for Brevig Mission
Deering:	City of Deering IRA Council for Deering NANA Regional Corporation, Deering Board Members
Nome:	King Island Native Corporation City of Nome Traditional Council for Nome Nome Eskimo Community King Island Native Community Bering Straits Native Corporation - P.O. Box 1008, Nome, AK 99762
Shishmaref:	Shishmaref Native Corporation City of Shishmaref IRA Council for Shishmaref
Teller:	Teller Native Corporation City of Teller IRA Council for Teller Traditional Council for Mary's Igloo Mary's Igloo Native Corporation
Wales:	Wales Native Corporation City of Wales IRA Council for Wales
Other:	Alaska Maritime National Wildlified Refuge - 202 Pioneer Ave., Homer, AK 99603 Bureau of Land Management - 1150 University Ave., Fairbanks, AK 99709 Kawerak - P.O. Box 948, Nome, AK 99762 Maniilaq, Inc. - P.O. Box 256, Kotzebue, AK 99752 Reindeer Herders Association - P.O. Box 948, Nome, AK 99762 USDI NPS, Bering Land Bridge - P.O. Box 220, Nome, AK 99762 Bering Straits CRSA-P.O. Box 28. Unalakleet, AK 99684

Management Unit 5. Southwest Seward Peninsula

<i>Community</i>	<i>Organization</i>
Brevig Mission:	Brevig Mission Native Corporation Mission City of Brevig Mission Traditional Council for Brevig Mission
Council:	Traditional Council for Council Council Native Corporation
Golovin:	Golovin Native Corporation City of Golovin Traditional Council for Golovin
Nome:	Council Native Corporation King Island Native Corporation Sitnasuak Native Corporation Solomon Native Corporation City of Nome Traditional Council for Nome Traditional Council for Council Nome Eskimo Community King Island Native Community Bering Straits Native Corporation - P.O. Box 1008, Nome, AK 99762
Shishmaref:	Shishmaref Native Corporation City of Shishmaref IRA Council for Shishmaref
Teller:	Teller Native Corporation City of Teller IRA Council for Teller Traditional Council for Mary's Igloo Mary's Igloo Native Corporation
Wales:	Wales Native Corporation City of Wales IRA Council for Wales
White Mountain:	White Mountain Native Corporation City of White Mountain IRA Council for White Mountain
Other:	Alaska Maritime National Wildlife Refuge - 202 Pioneer Ave., Homer, AK 99603 Kawerak - P.O. Box 948, Nome, AK 99762 Reindeer Herders Association - P.O. Box 948, Nome, AK 99762 USDI NPS, Bering Land Bridge - P.O. Box 220, Nome, AK 99762 USDI Bureau of Land Management - 1150 University Ave., Fairbanks, AK 99709 Bering Straits CRSA-P.O. Box 28, Unalakleet, AK 99684

Management Unit 6. Norton Sound

<i>Community</i>	<i>Organization</i>
Elim:	City of Elim Elim Native Corporation IRA Council for Elim
Golovin:	Golovin Native Corporation City of Golovin Traditional Council for Golovin
Koyuk:	Koyuk Native Corporation City of Koyuk IRA Council for Koyuk
Shaktoolik:	Shaktoolik Native Corporation City of Shaktoolik IRA Council for Shaktoolik
St. Michael:	St. Michael Native Corporation City of St. Michael IRA Council for St. Michael
Unalakleet:	Unalakleet Native Corporation City of Unalakleet IRA Council for Unalakleet Bering Straits CRSA - P.O. Box 28, Unalakleet, AK 99684
Other:	Alaska Maritime National Wildlife Refuge - 220 Pioneer Ave., Homer, AK 99603 Bering Straits Native Corporation - P.O. Box 1008, Nome, AK 99762 Kawerak - P.O. Box 948, Nome, AK 99762 Maniilaq, Inc. - P.O. Box 256, Kotzebue, AK 99752 Reindeer Herders Association - P.O. Box 948, Nome, AK 99762 USDI Bureau of Land Mgmt. - 1150 University Ave., Fairbanks, AK 99709

Management Unit 7. Remnant Rivers

<i>Community</i>	<i>Organization</i>
Ambler:	City of Ambler IRA Council for Ambler NANA Regional Corporation, Ambler Board Members
Buckland:	City of Buckland IRA Council for Buckland NANA Regional Corporation, Buckland Board Members
Deering:	City of Deering IRA Council for Deering NANA Regional Corporation, Deering Board Members

Management Unit 7. Remnant Rivers (continued)

<i>Community</i>	<i>Organization</i>
Kiana:	City of Kiana Traditional Council for Kiana NANA Regional Corporation, Kiana Board Members
Kivalina:	City of Kivalina IRA Council for Kivalina NANA Regional Corporation, Kivalina Board Members
Kobuk:	City of Kobuk Traditional Council for Kobuk NANA Regional Corporation, Kobuk Board Members
Kotzebue:	City of Kotzebue IRA Council for Kotzebue Kikiktagruk Inupiat Corporation NANA Regional Corporation, Kotzebue Board Members Northwest Arctic Borough - P.O. Box 1110, Kotzebue, AK 99752 NAB, Planning Commission Chairman - P.O. Box 1110, Kotzebue, AK 99752 Selawik National Wildlife Refuge - P.O. Box 270, Kotzebue, AK 99752 USDI NPS Northwest Areas - P.O. Box 1029, Kotzebue, AK 99752
Noatak:	City of Noatak Traditional Council for Noatak NANA Regional Corporation, Noatak Board Members
Noorvik:	City of Noorvik IRA Council for Noorvik NANA Regional Corporation, Noorvik Board Members
Selawik:	City of Selawik IRA Council for Selawik NANA Regional Corporation, Selawik Board Members
Shungnak:	City of Shungnak IRA Council for Shungnak NANA Regional Corporation, Shungnak Board Members
Other:	Maniilaq, Inc. - P.O. Box 256, Kotzebue, AK 99752 USDI Bureau of Land Mgmt. - 1150 University Ave., Fairbanks, AK 99709 USDI NPS, Gates of the Arctic - P.O. Box 74680, Fairbanks, AK 99707

Appendix C

PUBLICATIONS RELATED TO THE AREA PLAN (REFERENCES)

Planning Reports

Northwest Area Plan - Comments from Public Meetings, October - November 1985. Alaska Department of Natural Resources. Undated.

Northwest Area Plan - Summary of Public Comments By Resource Topic. Alaska Department of Natural Resources. Fall, 1985.

Northwest Area Plan - Issue Analysis Report. Alaska Department of Natural Resources. March, 1986.

Northwest Area Plan - Land Use Alternatives for State Lands in Northwest Alaska. Alaska Department of Natural Resources. March, 1987.

Northwest Area Plan - Public Comments on Land Use Alternatives and Proposals, March - April 1987. Alaska Department of Natural Resources. June, 1987.

Northwest Area Plan - Agency Review Draft. Alaska Department of Natural Resources. December, 1987.

Northwest Area Plan - Public Review Draft. Alaska Department of Natural Resources. June, 1988.

Northwest Area Plan - Response to Public Comment on the Draft Plan. Alaska Department of Natural Resources. December, 1988.

Background Data & Resource Reports

Coal Resource Potential of the Northwest Alaska Resource Management Area. Division of Geological and Geophysical Surveys, Alaska Department of Natural Resources. Public Data File 85-42E. March, 1986.

Northwest Alaska Cultural Resources Report. Craig Mishler, Ed. Division of Geological and Geophysical Surveys, Alaska Department of Natural Resources. Public Data File 85-42L. May, 1986.

Northwest Alaska Resource Mapping Project, Mineral Potential. Division of Geological and Geophysical Surveys, Alaska Department of Natural Resources. Public Data File 85-42E. June, 1986.

Northwest Area Plan - Cultural Resource Report. Alaska Department of Natural Resources. February, 1989.

Northwest Area Plan - Fish and Wildlife Resource Report. Alaska Department of Natural Resources. February, 1989.

Northwest Area Plan - Forestry Resource Report. Alaska Department of Natural Resources. November, 1988.

Northwest Area Plan - General Land Use Report, Draft. Alaska Department of Natural Resources. August, 1986.

Northwest Area Plan - Land Conveyance Resource Report. Alaska Department of Natural Resources. February, 1989.

Northwest Area Plan - Land Status Resource Report. Alaska Department of Natural Resources. February, 1989.

Northwest Area Plan - Minerals Resource Report. Alaska Department of Natural Resources. November, 1988.

Northwest Area Plan - Oil and Gas Resource Report. Alaska Department of Natural Resources. February, 1989.

Northwest Area Plan - Population History and Projections. Alaska Department of Natural Resources. June, 1988.

Background Data & Resource Reports (continued)

Northwest Area Plan - Recreation Resource Report. Alaska Department of Natural Resources. November, 1988.

Northwest Area Plan - Reindeer Grazing Resource Report. Alaska Department of Natural Resources. June, 1988.

Northwest Area Plan - Subsistence Resource Report. Alaska Department of Natural Resources. June, 1988.

Northwest Area Plan - Transportation Resource Report. Alaska Department of Natural Resources. February, 1989.

Northwest Area Plan - Working Maps for Trails. Alaska Department of Natural Resources. 19 quadrangles. 1987

Northwest Easement Atlas, Kotzebue Area. Alaska Department of Natural Resources, Division of Land and Water Management, Anchorage, Alaska. 1988.

Northwest Easement Atlas, Nome Area. Alaska Department of Natural Resources, Division of Land and Water Management, Anchorage, Alaska. 1988.

Appendix D

CRITERIA USED FOR THE CHAPTER 3 SUMMARY CHARTS

RESOURCE RATINGS USED IN THE RESOURCE INFORMATION SUMMARY CHARTS

Nine resource reports were prepared for developing the Northwest Area Plan alternatives and management proposals in 1987. The reports are referenced in Appendix C. The reports evaluated the distribution, quantity, and quality of each of the nine major resources in the planning area. Areas were given ratings for the resources they contained. These ratings are outlined by subunit in the Resource Information Summary charts in Chapter 3. A list of the major criteria for ratings for each resource follows.

Cultural Resources. Areas with known or probable cultural values are portrayed on maps developed with information taken from the Alaska Heritage Resource Survey (1:250,000 series U.S.G.S. topographic maps) and by State Office of History and Archaeology staff from the Division of Parks and Outdoor Recreation. Areas with "high probability of sites, but none known," were delineated based on resource availability, topography, site locations in similar but known areas, and field experience. The cultural resource report also lists, by quadrangle, areas with high cultural value not shown on the cultural resource maps because mapping was restricted to state-owned or state-selected lands. For further explanation, see Cultural Resource Report, referenced in Appendix C.

Mapped cultural resource areas were categorized as follows:

1. National Register sites.
2. Areas with known sites or a combination of known sites and high probability for sites.
3. High probability of sites, but none known.

Fish and Wildlife Resources. The Habitat Division of ADF&G determined the suitability of land as wildlife habitat and assigned values (A-1, A-2, B-1, B-2, and C in descending order) based upon estimates of habitat quality and human use. The species distribution and life history of key species (e.g. moose, anadromous fish, caribou, bear) were first mapped using important life functions (e.g. spawning, winter concentrations, calving areas). These factors were then aggregated, putting the highest values on biological criticality and species diversity. Subsistence use information derived from the Habitat Management Guides and from the Subsistence Division's Northwest Mapping Project were added to habitat values to raise rankings of areas that receive a high level of use. For further explanation, see Fish and Wildlife Resource Report, referenced in Appendix C. Habitat categories are defined as follows:

Suitability

Category	Definition
----------	------------

A-1	A discrete habitat area needed to sustain a species within a region
A-2	Special value habitat and/or harvest area
B-1	High value habitat and/or harvest area
B-2	Moderate value habitat and/or harvest area
C	Low value habitat and/or harvest area

Forestry Resources. Two sources of information were used to map the forest resources in the region. For the Seward Peninsula, the timber typing is based on 1:125,000-scale ecological site maps produced by the U.S. Department of Agriculture, Soil Conservation Service. For the Kobuk River area, the D.G.G.S. produced

1:63,360-scale vegetation maps from interpretation of aerial photographs for state-owned and state-selected lands. The maps have not been field checked.

Forested areas have stands of spruce (black or white) or hardwood or both. Areas without these types of forest are rated "low to none." Communities that use driftwood were determined by a telephone survey for the NWAP in February 1986. For further explanation, see Forestry Resource Report, referenced in Appendix C.

Land Conveyances. In order to identify settlement potential for state-owned and state-selected land in the Northwest Plan area, three groups of factors were evaluated:

Capability potential, the physical ability of land to support settlement use, was evaluated using six characteristics--permafrost distribution, frost heave potential, drainage and/or permeability, bearing strength, slope stability and material source potential.

Suitability potential, the immediate potential to be used for settlement based on social or economic constraints or opportunities, was derived by modifying capability ratings based on access and vegetation (forest cover) factors.

Feasibility areas, those areas with suitability potential that are most likely to be used for settlement, were determined on the basis of demand, access type and quality, historical or existing settlement patterns, and land ownership patterns. Some areas were identified as feasible for settlement based solely on supply and demand considerations.

Based on geological constraints and environmental hazards, some units of terrain were dropped from settlement considerations because they were clearly incapable of supporting settlement. Using the aforementioned factors, remaining lands were ranked for settlement potential. Based on this procedure, settlement suitability was rated as high, moderate, low, or unsuitable (or incapable) at 1:500,000 scale for each area of state land. For further explanation, see Land Conveyance Resource Report, referenced in Appendix C.

Minerals. Based on analysis of existing data, including geology, claim locations, magnetic-field strength, and known mineral occurrences, a

mineral potential score was established for each township within three of four NWAP subregions. Time did not permit assessment of mineral potential in the lower Norton Sound Subregion where mineral potential is thought to be minimal. Each township assessed was assigned one of the following mineral potential ratings:

Very low - Geologic environment generally unfavorable; little bedrock exposed, low potential for placers or sandstone-hosted metals; no known mineral occurrences; unfavorable geochemistry or geophysics; off trend with more favorable areas; no mining-claim activity; unfavorable metallogenic and tectonic terrane.

Low - Some aspects of geologic environment may be favorable, but generally not favorable; few, if any, known deposits; little or no mining-claim activity; geochemical and geophysical structures generally negative; little bedrock exposed; generally unfavorable metallogenic and tectonic terrane.

Moderate - Geologic environment favorable; significant deposits not known; low mining-claim activity; geochemical and geophysical signatures may be favorable; cell may be distantly on trend with cells of higher favorability.

High - Geologic environment very favorable; on trend or in same unit that hosts significant mineral occurrences; significant deposits not currently known; some mining-claim activity; geochemical and geophysical signatures favorable; favorable metallogenic and tectonic terrane.

Very high - Geologic environment very favorable; significant mineral deposits known; numerous active mining claims; geophysical and geochemical signatures favorable; very favorable metallogenic and tectonic terrane.

To take into account the diversity in quality of available data on which assessments were prepared, a data quality score for each township was prepared with the following values:

Very poor - Only geologic mapping at 1:1,000,000 scale or similar generalized maps; low density or no regional geophysical data base; general lack of information.

Poor - Lower quality 1:250,000 scale geologic mapping units pertinent to mineral deposits not shown; regional low-density geophysical

coverage; low-density geochemical coverage; few, if any, local studies.

Fair - Good, careful 1:250,000 or 1:125,000 scale geologic mapping with units pertinent to mineral deposits shown; regional low-density geophysical coverage; low-density geochemical data base; some local studies.

Good - Detailed (1:63,360 scale or larger) geologic mapping; ordinary geochemical coverage; aeromagnetic coverage at 1/2- to 1-mile spacing; some local prospect studies.

Very good - Detailed (1:63,360 scale or larger) geologic mapping; numerous units mapped; alteration zones and gossans shown; comprehensive geochemical data base at 1/4-mile spacing; other geophysical data available; detailed studies of mines or prospects; good surficial geology.

Areas in which there is possibility for coal discovery and areas of known coal occurrences were identified and mapped based on criteria such as known coal deposits, occurrences of sedimentary rock known to host coal, geologic structures favorable to coal occurrences, and proximity to known coal deposits. Areas were categorized as follows:

1. Very low to low possibility for discovery.
2. Low to medium possibility for discovery.
3. Medium to high possibility for discovery.
4. Known coal areas of lesser occurrences (marginal because of lower BTU, low tonnage, thin beds or structural complexity).
5. Known coal areas--medium to large that contain measured reserves of resalable coal (mining may be possible under proper conditions).

For further explanation, see Minerals Resource Report, referenced in Appendix C.

Oil and Gas. Within the NWAP, the Selawik Basin, Colville Basin, Brooks Range Foothills, and Brooks Range Province are known to have some oil and gas potential. Within these areas,

oil and gas potential has been rated as moderate, low, or unknown, based on evaluation of limited available data. A reservoir and source study currently being completed by DGGs will allow for a better evaluation of oil and gas potential in the area. For further explanation see Oil and Gas Resource Report, referenced in Appendix C.

Recreation. The assessment of nonconsumptive recreation opportunities for the area was drawn from the Joint Federal-State Planning Commission's Resource Inventory, Northwest Region. This inventory assesses opportunities within fairly specific management subunits. It utilizes a rating system based on the Bureau of Land Management's Recreation Information System modified to assist in inventorying this large area. Areas were mapped that had existing recreation activities or that showed potential for future recreation. For further explanation, see Recreation Resource Report, referenced in Appendix C.

Reindeer Grazing. Winter range for reindeer is based on a range survey conducted by the U.S. Department of Agriculture, Soil Conservation Survey (SCS), completed in 1983. The information was based on 14 consolidated vegetative types that constitute winter range or that may be potential winter range. Lands with generalized winter range that covers 50 percent or more of the area are rated "winter range" in the resource summary ratings. Reindeer fawning areas are also noted when they exist, as indicated by preliminary range management information from the SCS. For further explanation, see Reindeer Grazing Resource Report, referenced in Appendix C.

Subsistence. Subsistence use is documented by studies of the Alaska Department of Fish and Game Subsistence Division, in the Habitat Management Guides. Maps were prepared by community, as noted in the resource summary charts, for each species harvested. For further explanation, see Subsistence Resource Report, referenced in Appendix C.

CRITERIA USED FOR THE LAND-USE DESIGNATION SUMMARY CHARTS

Specific land-use designations are applied for primary surface use when lands have one or more of the following characteristics:

- High surface values
- Intensive subsurface activity or high potential for future intensive development
- Intensive public use
- Needs for special management to protect resources or avoid resource conflicts
- Near-term development likely.

In Northwest Alaska, designations with these characteristics include Habitat and harvest uplands, Habitat and harvest tidelands, Minerals, Minerals/Habitat and harvest lands, Coal/Habitat and harvest lands, Recreation/Habitat and harvest lands, and Settlement.

"General use" designations are used for lands with the following characteristics:

- Moderate or low resource values
- Near-term development unlikely
- Dispersed public use
- Few resource conflicts.

These designations equate to classifications as shown in the conversion chart, Table 4-1 on Page 4-2.

A **primary use** is defined as a designated, allowed use of major importance in a particular management unit. Resources in the unit will be managed to encourage, develop, or protect this use. Where a management unit has two or more designated primary uses, the management intent statement and guidelines for the unit, together with existing regulations and procedures, will direct how resources are managed to avoid or minimize conflict between these primary uses.

A **secondary use** is defined as a designated, allowed use considered important, but intended to receive less emphasis than a primary use because it has less potential than a primary use or contributes less to achieving the management intent of the unit than a primary use, or occurs only on limited sites. In those site-specific situations where a secondary use has a higher value than a primary use, the secondary use may take precedence over the primary use. Management for a secondary use will recognize and protect primary uses through application of guidelines, regulations, and procedures. However, if a secondary use cannot occur without detrimentally affecting a primary use in the management unit as a whole, the secondary use will not be allowed.

The chart on the following page summarizes the criteria used to apply these designation rules to state lands in the Northwest Area, based on the resource ratings in the aforementioned discussion.

DESIGNATION RULES

Resource	When is it primary?	When is it secondary?
Fish & Wildlife Habitat & Harvest	A-1, A-2, B-1 on retained lands	B-2, C; or higher values on lands offered for land sales
Forestry	None	Where trees exist and continued use is expected
Minerals or Coal	Intensive subsurface activity; high potential for future intensive development, or near-term development likely	None
Oil and Gas	No surface designation	None
Recreation	On Noatak and Kobuk rivers (intensive public use)	Where documented recreation exists
Reindeer Grazing	None	On Seward Peninsula in existing grazing permit areas
Settlement	In low, moderate, or high areas as negotiated by planning team and shown on map	If not primary, land sales are prohibited
Subsistence	Habitat values raised by high level use, see Fish & Wildlife Resources, Appendix D, page D-1.	

Appendix E

SUMMARY OF LEASES & PERMITS BY MANAGEMENT UNIT

Leases and permits on state lands in the Northwest Planning Area are listed by subunit in the table on Page E-2. This table includes leases and permits entered on the state computerized Land Administration System (LAS) as of October, 1987. Not all leases and permits are covered by this list. The LAS was searched for

- noncompetitive public and charitable use leases
- noncompetitive tidelands leases
- other noncompetitive leases
- material sales
- Division of Land and Water permits
- State cabin program entries.

Summary of Leases and Permits

Actions	No. Issued	No. Applicants	Area Affected
Trapping cabin permits	2 issued	includes 4 cabins	no land interest conveyed
Tideland leases		3 applications	0.517 acres
Public and charitable use	1 issued		no land interest conveyed
Personal use cabin	3 issued		no land interest conveyed
Material sale	11 issued	6 applications	174 acres *
Total: 26 actions	17 issued	9 applications	174.517 acres affected *

*Affected acreage: LAS inventory for this area does not list acreage for submerged and tideland material sales and certain other land actions.

SUMMARY OF LEASES & PERMITS, Appendix E

MGMT. UNIT	SUB-UNIT	TYPE	STATUS	ADL NO.	TOWNSHIP	LOCATION	ACRES
Kotzebue Sound	2c	Tideland Lease	Applied	412501	T25N R24W 10 KM	South of Kivalina	---
	2c	Material Site	Issued	410573	T17N R18W 2,3,6,9,10,11	Kotzebue	---
	2f	Material Sale (subm.)	Applied	410836	T7N R12W 25,26 KM	Buckland	---
	2c, 2a	Material Site	Applied	412108	T27N R26W 5,6,7,8,9,21,22 KM	Kivalina Lagoon	---
	2f	Material Sale	Issued	412502	T28N R21W 28 KM	West of Kikmiksot Mt.	11.5
	2b	Material Sale	Issued	412509	T28N R21W 12 KM	Utak Creek, Wulik River	17.0
	2f	Material Sale	Issued	412510	T28N R21W 1 KM	Utak Creek, Wulik River	8.5
	2b	Material Sale	Issued	412511	T29N R20W 27 KM	Utak Creek, Wulik River	39.0
	2f	Material Sale	Issued	412512	T29N R19W 7 KM	Utak Creek, Wulik River	17.0
	2f, 2b	Material Sale	Issued	412513	T29N R19W 15,16 KM	Mulgrave Hills	67.0
	2f	Material Sale	Issued	412514	T30N R19W 34 KM	Mulgrave Hills	17.0
	2f	Material Sale (subm)	Applied	412590	T25N R19W 16 KM	Noatak River	---
	2c	Material Sale	Applied	412604	T16N R18W 4 KM	South of Kotzebue	---
	2e	Material Sale	Issued	412732	T26N R24W 4,9,10,14,15,23,33 KM	Between Kivalina and Cape Krusenstern	---
	2e	Material Sale	Applied	413177	T17N R18W 10 KM	Kotzebue	---
	2f	Material Sale (subm)	Applied	409568	T6N R12W 2 KM	Buckland River	---
Kobuk	3a	Trapping Cabin	Issued	403736	T18N R12E 24 KM	Lower Maunaluk River	---
	3b	Trapping Cabin	Issued	407141	T19N R14E 10 KM	Middle Maunaluk River	---
	3b	Trapping Cabin			T19N R14E 16 KM	Aksiksat Creek	---
	3a	Trapping Cabin			T18N R17E 24 KM	Lake Minakakosa	---
Northwest Seward Peninsula	4b	Public and Charitable Use	Issued	410463	T6N R35W 5 KM	Shishmaref	---
	4b	Personal Use Cabin	Issued	412088	T2N R28W 6 KM	South of Harris Dome	---
Southwest Seward Peninsula	5h	Personal Use Cabin	Issued	411927	T6S R30W 16 KM	Homestake Creek	---
	5b	Personal Use Cabin	Issued	412003	T6S R30W 9 KM	Homestake Creek	---
	5f	Tideland Lease	Applied	412591	T12S R32W 23 KM	Cape Nome	---
	5g	Material Site (subm)	Issued	884	T5S R24W 25,36 KM	Kuzitrin River	---
	5g	Material Sale (subm)	Issued	400941	T9S R24W 25,36 KM	Fish River, White Mountain	---
Norton Sound	6c	Tidelands Lease	Applied	410786	T23S R17W 19 KM	Unalakleet	0.517

Appendix F

1985 POPULATION OF COMMUNITIES WITHIN THE NORTHWEST PLANNING AREA

Community

Ambler.....	275
Brevig Mission	159
Buckland.....	250
Deering.....	148
Elim.....	248
Golovin	131
Kiana.....	404
Kivalina.....	272
Kobuk	86
Kotzebue.....	2,981
Koyuk.....	202
Noatak	305
Nome	3,876
Noorvik.....	517
Point Hope.....	570
Point Lay	142
St. Michael	299
Selawik.....	589
Shaktoolik	171
Shishmaref.....	410
Shungnak.....	226
Stebbins	368
Teller	247
Unalakleet.....	787
Wales.....	143
White Mountain.....	158

TOTAL..... 13,964

Source: Cunningham, Paul, Municipal/borough populations: Anchorage, Alaska Department of Community and Regional Affairs, unpublished data, 1986, 8p.

Appendix G

DESIGNATIONS & APPROXIMATE ACREAGE BY MANAGEMENT UNIT

Land Use Designations	UNIT 1	UNIT 2	UNIT 3	UNIT 4	UNIT 5	UNIT 6	TOTALS *
General use tidelands	106,000	1,325,482	----	213,300	121,200	2,800	1,768,782
General use uplands	1,220,600	1,362,600	310,000	1,089,800	738,600	343,750	5,065,450
Habitat & harvest tidelands	529,600	1,269,800	----	603,250	244,700	939,200	3,586,550
Habitat & harvest uplands	1,228,050	1,067,400	1,112,900	660,100	503,800	182,450	4,754,700
Habitat & harvest lands/recreation	----	----	39,850	----	----	----	39,850
Mineral lands	----	235,400	92,800	201,150	120,800	----	650,150
Mineral/habitat & harvest lands	----	----	402,300	11,200	131,400	----	544,900
Coal/habitat & harvest lands	69,750	402,300	----	----	----	----	472,050
Settlement	----	----	7,800	----	23,200	----	31,000
TOTALS	3,154,000	5,662,982	1,965,750	2,778,800	1,883,700	1,468,200	16,913,432

*The total includes acreage for shorelands beneath the large sounds, bays, inlets, and lagoons, but does not include the state-owned shorelands beneath navigable waters (rivers and lakes) for most units.

Appendix H:

MINERAL ORDERS FOR THE NORTHWEST AREA PLAN

The Northwest Area Plan identifies certain areas where mineral entry status should be changed. Specific areas are identified for mineral closure in the management intent for individual subunits in Chapter 3. These recommendations are also described briefly in Chapter 4 under "Mineral Orders". DNR's Finding of the Commissioner needed to implement this order is contained in this appendix. The appendix also includes maps and descriptions of the areas proposed for mineral closures.

This appendix contains Mineral Closing Order #568, affecting 13 coastal bird rookeries, and 7 sheefish spawning areas along the Kobuk River.

STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF LAND AND WATER MANAGEMENT

MINERAL ORDER NO. 568

 X Closing Lands to Mineral Entry Opening Lands to Mineral Entry

I. Geographic Name Northwest Area

II. This mineral order is based on written justification contained in:

Land Planning Report dated _____

<u>X</u>	<u>Northwest</u>	Area Plan
		Management Plan

III. Legal Description	Acreage
------------------------	---------

See attachments 1 and 3

See attachment 2

IV. This order is subject to valid existing rights and issued under the authority granted by AS 38.05.185 - 38.05.275 to the Department of Natural Resources. The above described lands are hereby X closed opened to entry under the locatable mineral and mining laws of the State of Alaska.

Concur:

Dany Gustafson
Director
Division of Land and Water Management

2-9-89
Date

Concur:

Ernest Callaghan
Director
Division of Mining

2/9/89
Date

Approved by:

Donna Gosnell
Commissioner
Department of Natural Resources

2-24-89
Effective Date

10-1083 (08/85)

**NORTHWEST AREA PLAN
FINDING OF THE COMMISSIONER
FOR MINERAL CLOSING ORDER #568
A.S. 38.05.185 (a)**

The Northwest Area Plan (NWAP), developed in accordance with A.S. 38.04.065, identifies certain areas to be closed to new locatable mineral entry because mining activity would not be compatible with significant surface uses (A.S. 38.05.185). The areas to be closed are state-owned or state-selected lands at: 1) 13 bird rookeries on uplands and/or tidelands; 2) 7 sheefish spawning sites. These are areas of significant surface use, and the state is committed to take all reasonable actions necessary to preclude the creation of any new third-party interests in these lands, including mining claims and leasehold locations. These closures have been given public review through the Northwest Area planning process.

1). Seabird rookeries.

The thirteen identified areas provide unique nesting habitat on the seacliffs and abundant food resources in nearby offshore waters, enabling these areas to support large seabird colonies. They are crucial habitat areas that serve as a concentrated use area for the bird species during a sensitive life history stage, where alteration or disruption of the habitat could result in the permanent loss of the population and the species' sustained yield.

The coast of the Seward Peninsula hosts seven important seabird rookeries, several of which are among the largest in the region. At Bluff, on the southern shore of the Peninsula, four important bird rookeries have been identified. Here, the bird populations range between 40,000 and 90,000, with murres accounting for approximately 75 percent of the nesting birds. In addition, two important seabird colonies are found in the vicinity of Cape York, and two are located near Rocky Point.

In Kotzebue Sound, two important bird rookeries have been identified: one on Choris Peninsula, and the other at Ninemile Point. The Choris Peninsula area hosts thousands of seabirds, including glaucous gulls, horned puffins, black-legged kittiwakes, pigeon guillemots, black guillemots, tufted puffins, pelagic cormorants, and parakeet auklets.

Three important rookeries have been identified on the coast between Cape Lisburne and Icy Cape. Corwin Bluffs, Solivik Island, and Icy Cape Spit all host significant seabird populations, including those of the common murre, thick-billed murre, and black-legged kittiwake.

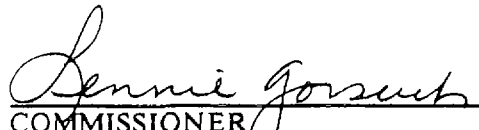
The above mentioned rookeries, their adjacent uplands, tidelands, and submerged lands are crucial to the continued health of these seabird populations. Any mining activity in the uplands within 1/4 mile of these rookeries would have a detrimental impact on the seabird population of that area. In addition, in areas of high mineral potential, tidelands and submerged lands within 1/4 mile of the rookeries will be closed to new mineral entry. Mining in the above-referenced areas is incompatible with the seabird rookeries' continued existence, and is contrary to Northwest Area Plan land management policies for fish and wildlife habitat.

2). Sheefish spawning sites.

The seven sheefish spawning sites identified in this finding are the only known and documented spawning sites for sheefish in the Kobuk River basin. Habitat requirements for sheefish spawning are extremely specific, and whole populations can spawn in relatively small areas. The water must be well-oxygenated and lie within a narrow range of temperatures, and the streambed gravel must be coarse and free of silt. Riparian land adjacent to streams is also essential for maintaining productivity.

Any new mineral entry would be prohibited: a) within the streambed of the identified spawning areas, and; b) on state-owned or state-selected uplands within 200 feet of the ordinary high water mark on either side of the identified spawning areas. Fish from these spawning sites are an important part of subsistence and sport fisheries in the Kobuk River basin. Any mining activity within these critical habitat areas is incompatible with the continued existence of the sheefish population and is contrary to Northwest Area Plan land management policies for fish and wildlife habitat.

Therefore it is my finding, in accordance with A.S. 38.05.185, that the best interests of the state and its residents are served by the closure to entry under the locatable mineral and mining laws of the State of Alaska of the above areas, more particularly described in Mineral Closing Order #568. This closure is subject to valid existing rights.



COMMISSIONER
Department of Natural Resources

2-24-89
Date

ATTACHMENT 1
LEGAL DESCRIPTIONS OF LANDS CLOSED TO NEW MINERAL ENTRY
FOR MINERAL CLOSING ORDER #568

1). Bird rookeries--lands that will be closed to new mineral entry are listed below (Uplands are defined as those state lands found above the Mean High Tide line). Maps depicting these areas are found in Attachment 3.

<u>Location</u>	<u>Name</u>
T11N R39W, UM. All uplands within the following aliquot parts: Sec. 7: SW1/4 NE1/4; SE1/4 NW1/4; NE1/4 SW1/4 NW1/4 SE1/4; N1/2 SW1/4 SE1/4;	Icy Cape
T10N R41W, UM. All uplands within the following aliquot parts: Sec. 21: N1/2 SE1/4; SE1/4 NE1/4; Sec. 22: W1/2 SW1/4 NW1/4; W1/2 NW1/4 SW1/4;	Solivik Island
T6S R56W, UM. Sec. 36: All Uplands	Corwin Bluff
T7S R56W, UM. All uplands within the following aliquot parts: Sec. 1: N1/2 N1/2 N1/2 NE1/4; N1/2 NE1/4 NE1/4 NW1/4;	
T11N R15W, KRM. Secs. 19, 20, 21, 29, 30, 32, 33, 34: All uplands	Choris Peninsula
T10N 15W, KRM. Secs. 4, 5, 8, 9, 10, 14, 15, 16, 17: All uplands	
T8N R18W, KRM. Secs. 27, 28: All uplands All uplands within the following aliquot parts: Sec. 33: NE1/4 NE1/4; Sec. 34: NW1/4 NW1/4;	Ninemile Point
All tide and submerged lands 1/4 mile seaward of the following uplands: T1S R43W, KRM Secs. 3, 10:	Cape York
All tide and submerged lands 1/4 mile seaward of the following uplands: T1S R43W, KRM Sec. 13: E1/2; T1S R42W, KRM Sec. 18: W1/2;	King River

ATTACHMENT 1 - PAGE 2

<u>Location</u>	<u>Name</u>
All tide and submerged lands 1/4 mile seaward of the following uplands: T11S R27W, KRM Secs. 2, 11, 12: T11S R26W, KRM Sec. 6: E1/2; Sec. 7:	Topkok Head
T11S R26W, KRM. All uplands within the following aliquot parts: Sec. 4: S1/2 S1/2 N1/2; Sec. 5: S1/2; S1/2 N1/2; Including all tide and submerged lands 1/4 mile seaward of the above described uplands.	Topkok
T10S R26W, KRM. All uplands within the following aliquot parts: Sec. 35: E1/2 SE1/4; Sec. 36: W1/2 SW1/4; Including all tide and submerged lands 1/4 mile seaward of the above described uplands	Eldorado Creek
All tide and submerged lands 1/4 mile seaward of the following uplands: T11S R25W, KRM. Sec. 6: E1/2; Secs. 2, 3, 4, 5:	Bluff
T11S R23W, KRM. All uplands within the following aliquot parts: Sec. 30: S1/2; Sec. 31: Sec. 32: S1/2 N1/2; S1/2; W1/2 NW1/4 NW1/4; Sec. 33: SW1/4 SW1/4 NW1/4; NW1/4 SW1/4;	Chiukak
T12S R23W, KRM. All uplands within the following aliquot parts: Sec. 25: SW1/4; Sec. 36: NW1/4; W1/2 NE1/4;	Rocky Point

ATTACHMENT 1 - PAGE 3

2). Sheefish spawning sites--all or part of the Kobuk River shorelands (lands under non-tidal navigable waters) within the sections described below are closed to new mineral entry. In addition, all state (selected, tentatively approved, or patented) lands within 200 feet of the ordinary high water mark of either bank on the described portions of the Kobuk River streambed will be closed to new mineral entry. For a detailed description of these lands, see Attachment 3.

<u>Location</u>	<u>Name</u>
T17N R11E, KRM. Secs. 7, 8, 16, 17, 18, 21	Kobuk 1
T17N R11E, KRM. Secs. 22, 23, 27, 28	Kobuk 2
T17N R11E, KRM. Secs. 13, 24	Kobuk 3
T17N R12E, KRM. Secs. 18, 19, 20, 29	
T17N R12E, KRM. Secs. 35, 36	Kobuk 4
T17N R13E, KRM. Sec. 31	
T16N R13E, KRM. Secs. 5, 6	
T16N R13E, KRM. Secs. 4, 5, 8, 9, 10, 15, 16, 21, 22	Kobuk 5
T16N R14E, KRM. Secs. 22, 23, 24	Kobuk 6
T16N R15E, KRM. Sec. 19	
T16N R17E, KRM. Secs. 1, 11, 12	Kobuk 7
T16N R18E, KRM. Secs. 5, 6, 7, 8	

**ATTACHMENT 2
DESCRIPTIONS AND LOCATIONS
FOR MINERAL CLOSING ORDER #568**

<u>Township & Range</u>	<u>USGS Quad.</u>	<u>Northwest Area Plan Mgmt. Unit</u>	<u>Name</u>	<u>Acreage</u>	<u>Approx. Length (Miles)</u>
Bird Rookeries:					
T11N R39W, UM	Wainwright B5/B6	1	Icy Cape	130	--
T10N R41W, UM	Wainwright A6/A7	1	Solivik Island	80	--
T6S R56W, UM T7S R56W, UM	Point Hope D1	1	Corwin Bluff	110	--
T11N R15W, KRM T10N R15W, KRM	Selawik B6	2	Choris Peninsula	2830	--
T8N R18W, KRM	Kotzebue A1	2	Ninemile Point	50	--
T1S R43W, KRM	Teller B5	4	Cape York	190	--
T1S R43W, KRM T1S R42W, KRM	Teller B5	4	King River	160	--
T11S R26W, KRM T11S R27W, KRM	Solomon C4,C5	5	Topkok Head	480	--
T11S R26W, KRM T10S R26W, KRM	Solomon C4	5	Topkok	520	--
T10S R26W, KRM	Solomon C4	5	Eldorado Creek	180	--
T11S R24W, KRM T11S R25W, KRM	Solomon C4	5	Bluff	720	--
T11S R23W, KRM	Solomon C3, B3	5	Chiukak	490	--
T12S R23W, KRM	Solomon B3	5	Rocky Point	310	--
Subtotal				6,250	

ATTACHMENT 2 - PAGE 2

<u>Township & Range</u>	<u>USGS Quad.</u>	<u>Northwest Area Plan Mgmt. Unit</u>	<u>Name</u>	<u>Acreage</u>	<u>Approx. Length (Miles)</u>
Sheefish Spawning Areas:					
T17N R11E, KRM	Shungnak D1/D2	3	Kobuk 1	280	3
T17N R11E, KRM	Shungnak D1	3	Kobuk 2	220	2
T17N R11E, KRM T17N R12E, KRM	Shungnak D1	3	Kobuk 3	300	3.5
T17N R12E, KRM T17N R13E, KRM T16N R13E, KRM	Shungnak D1	3	Kobuk 4	620	3
T16N R13E, KRM	Shungnak D1	3	Kobuk 5	540	3.5
T16N R14E, KRM T16N R15E, KRM	Hughes D6	3	Kobuk 6	580	4
T16N R17E, KRM T16N R18E, KRM	Hughes D5	3	Kobuk 7	530	4
Subtotal				3,070	

Total acreage = 9,320
(less than one-tenth of a percent of state lands in planning area)

ATTACHMENT 3
MAPS OF MINERAL CLOSURES
FOR MINERAL CLOSING ORDER #568

Copies of the following USGS maps are attached:

1) Bird rookeries.

Kotzebue A-1
Point Hope D-1
Selawik B-6
Solomon B-3, C-3, C-4, C-5
Teller B-5
Wainwright A-6/A-7, B-5/B-6

2) Sheefish spawning sites.

Hughes D-5, D-6
Shungnak D-1, D-2

KEY:



Area affected by Mineral Closing Order #568: state-owned or state-selected uplands within one quarter mile of seabird rookeries and/or tide and submerged lands within one quarter mile of rookeries.

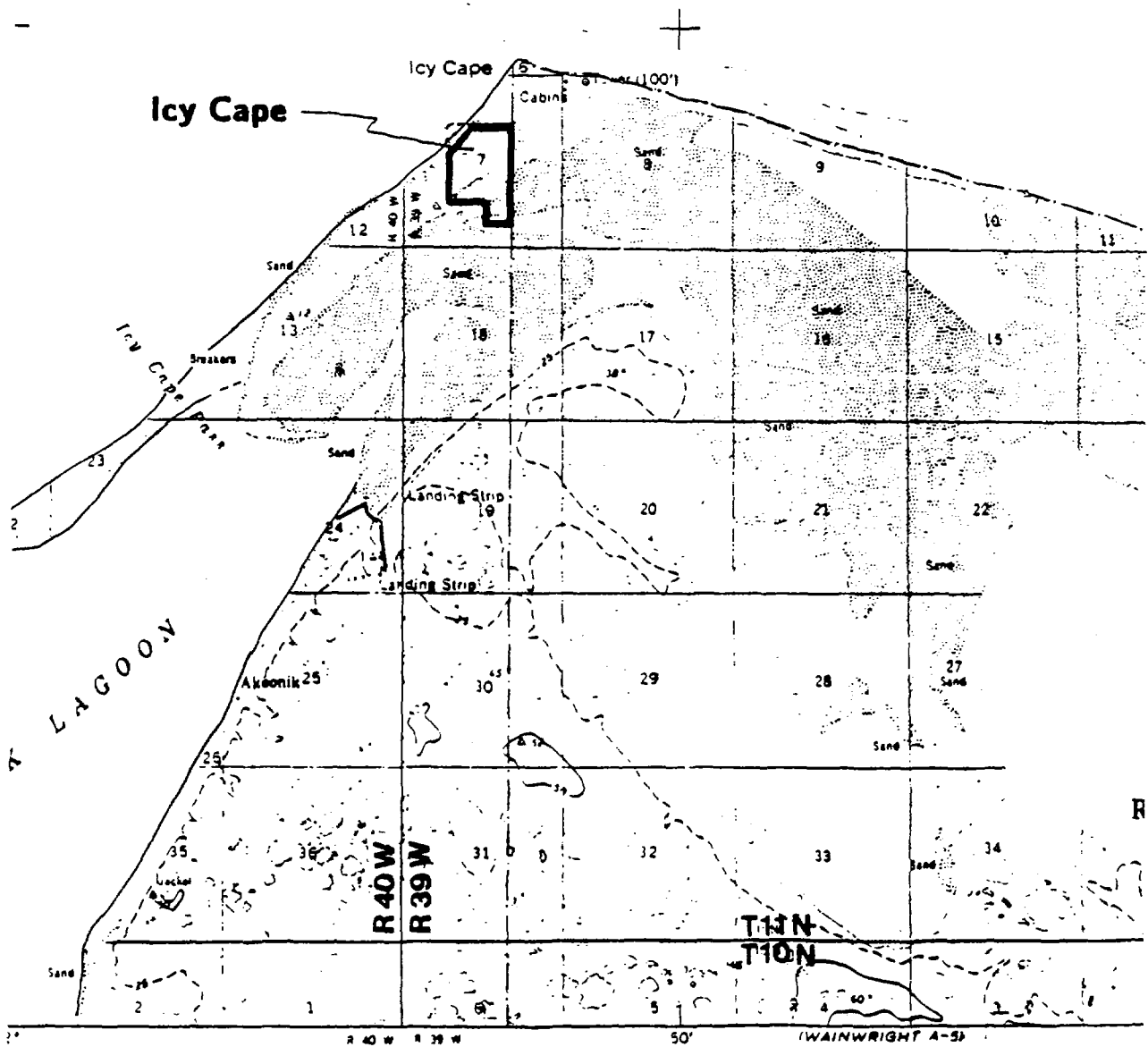


Area affected by Mineral Closing Order #568: Kobuk River shorelands (lands under non-tidal navigable waters), and all state-owned or state-selected lands within 200 feet of ordinary high water mark of either bank of the described shorelands.

BIRD ROOKERY

BASE MAP: USGS QUADRANGLE - WAINWRIGHT B5/B6

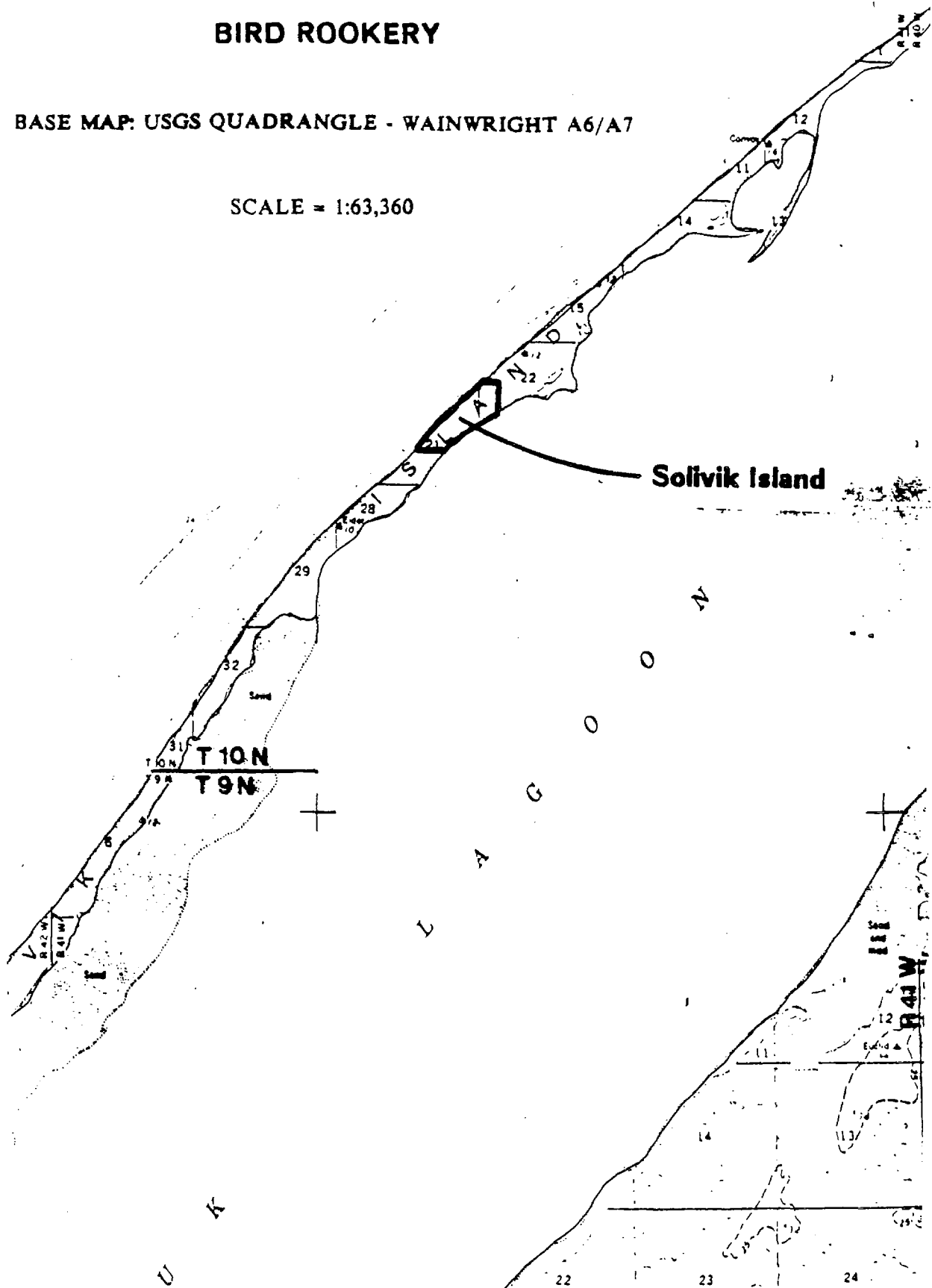
SCALE = 1:63,360



BIRD ROOKERY

BASE MAP: USGS QUADRANGLE - WAINWRIGHT A6/A7

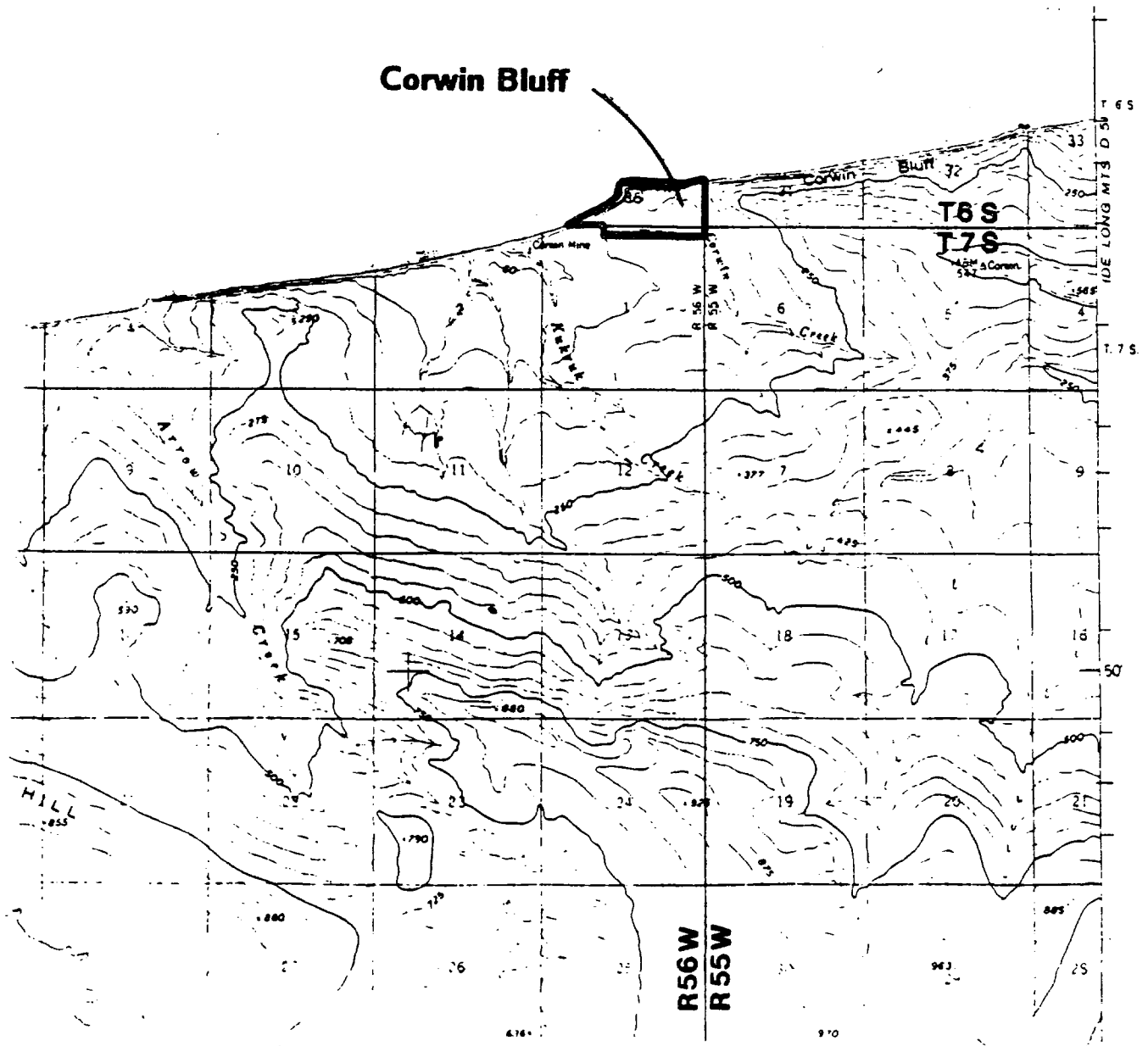
SCALE = 1:63,360



BIRD ROOKERY

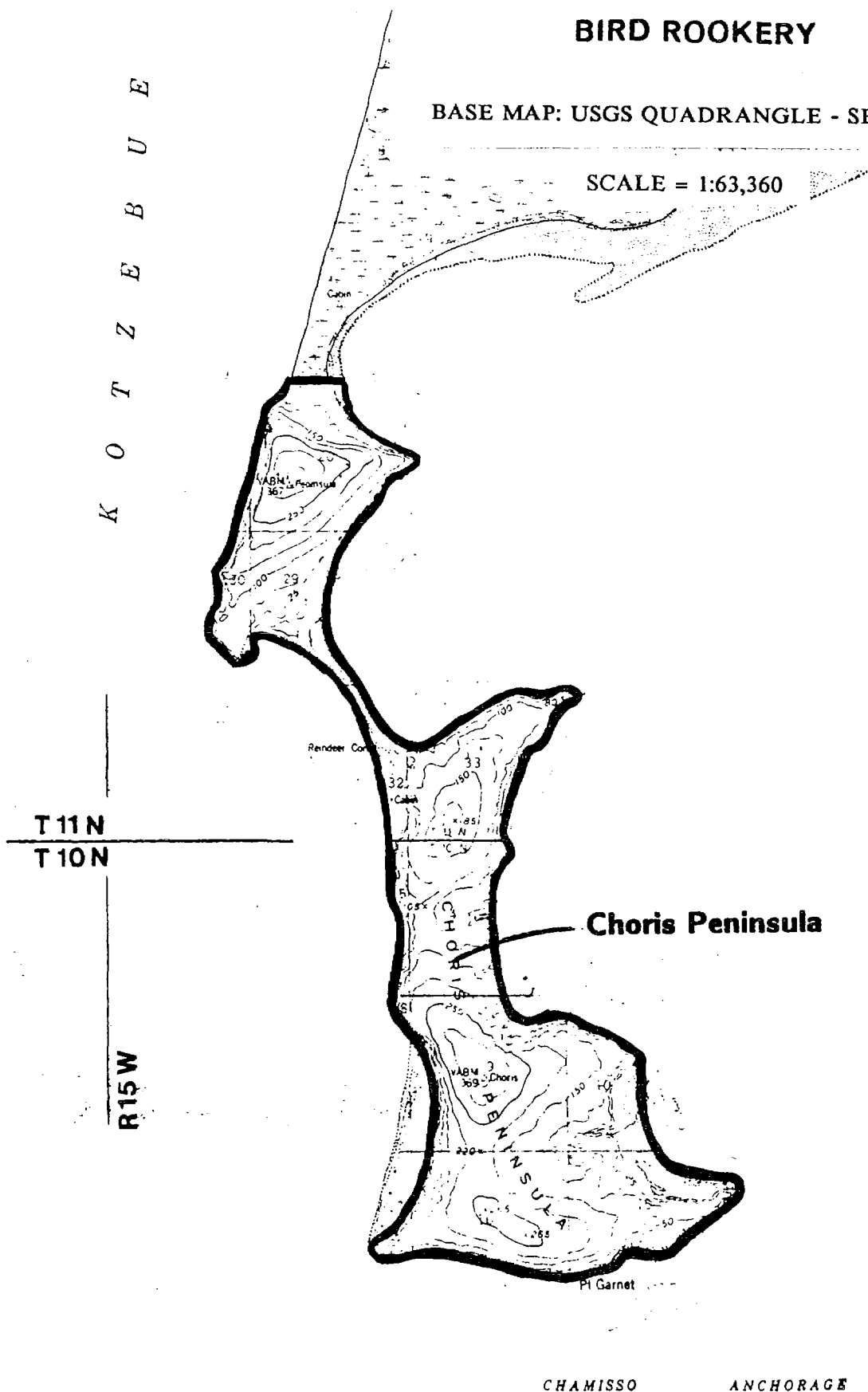
BASE MAP: USGS QUADRANGLE - POINT HOPE D1

SCALE = 1:63,360



Northwest Area Plan

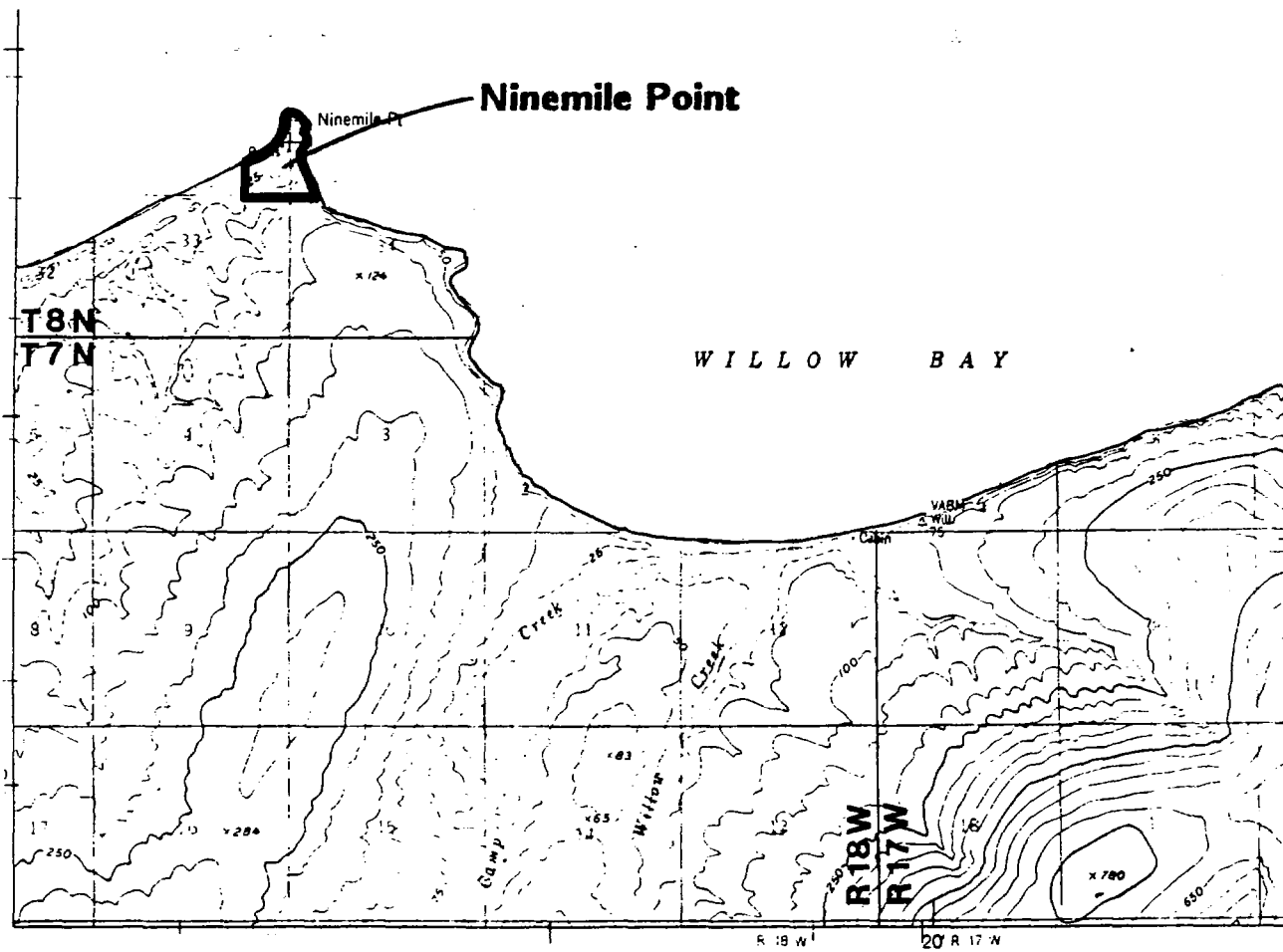
SCALE = 1:63,360



BIRD ROOKERY

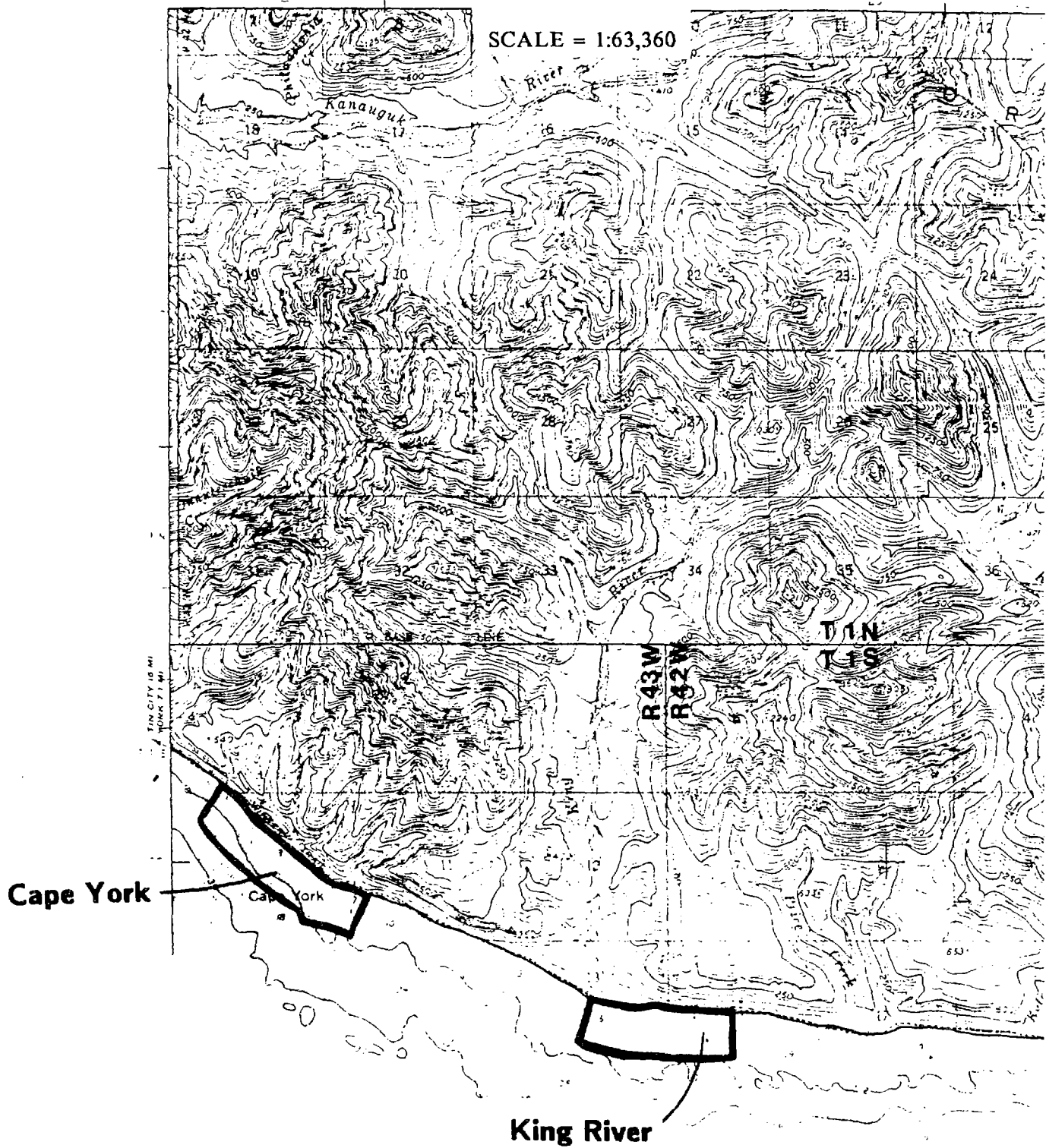
BASE MAP: USGS QUADRANGLE - KOTZEBUE A1

SCALE = 1:63,360



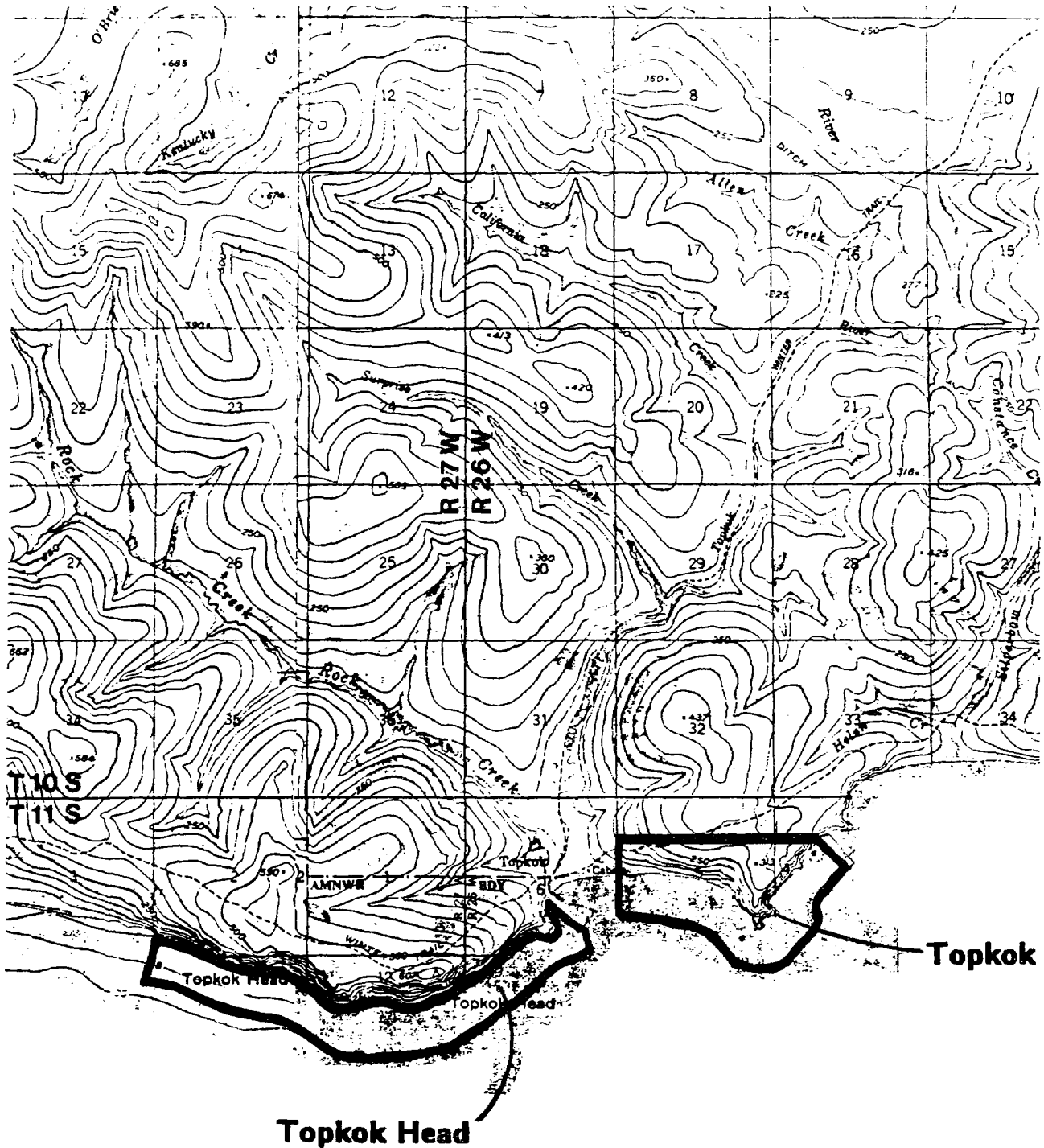
BIRD ROOKERY

BASE MAP: USGS QUADRANGLE - TELLER B5



BIRD ROOKERY
BASE MAP: USGS QUADRANGLE
SOLOMON C4, C5

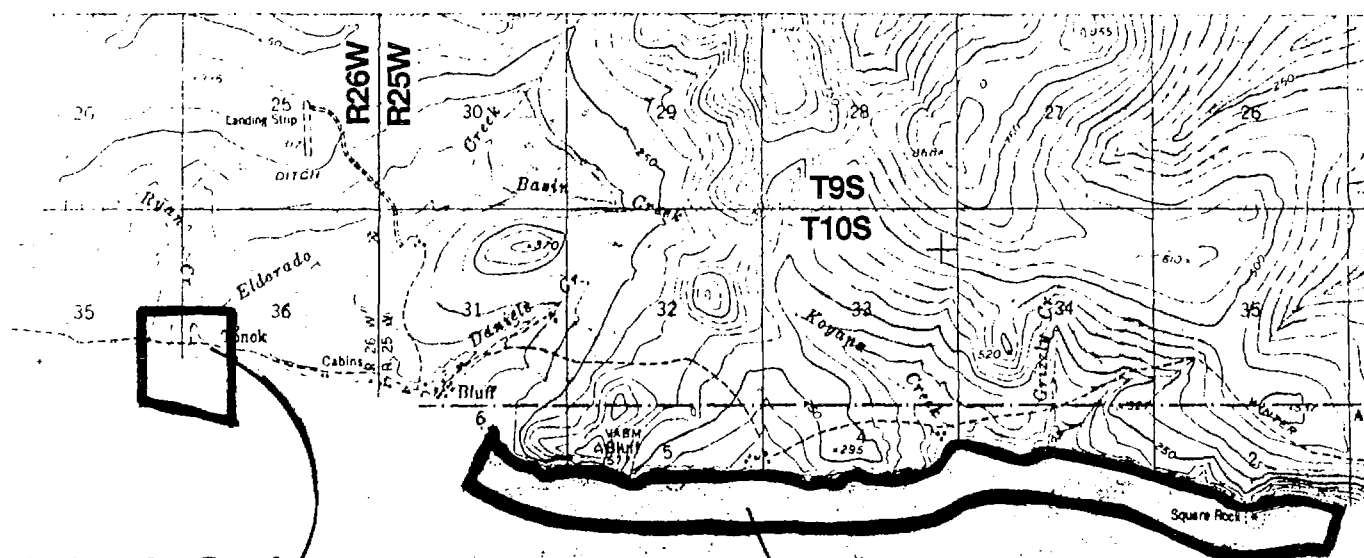
SCALE = 1:63,360



BIRD ROOKERIES

BASE MAP: USGS QUADRANGLE - SOLOMON C4

SCALE = 1:63,360

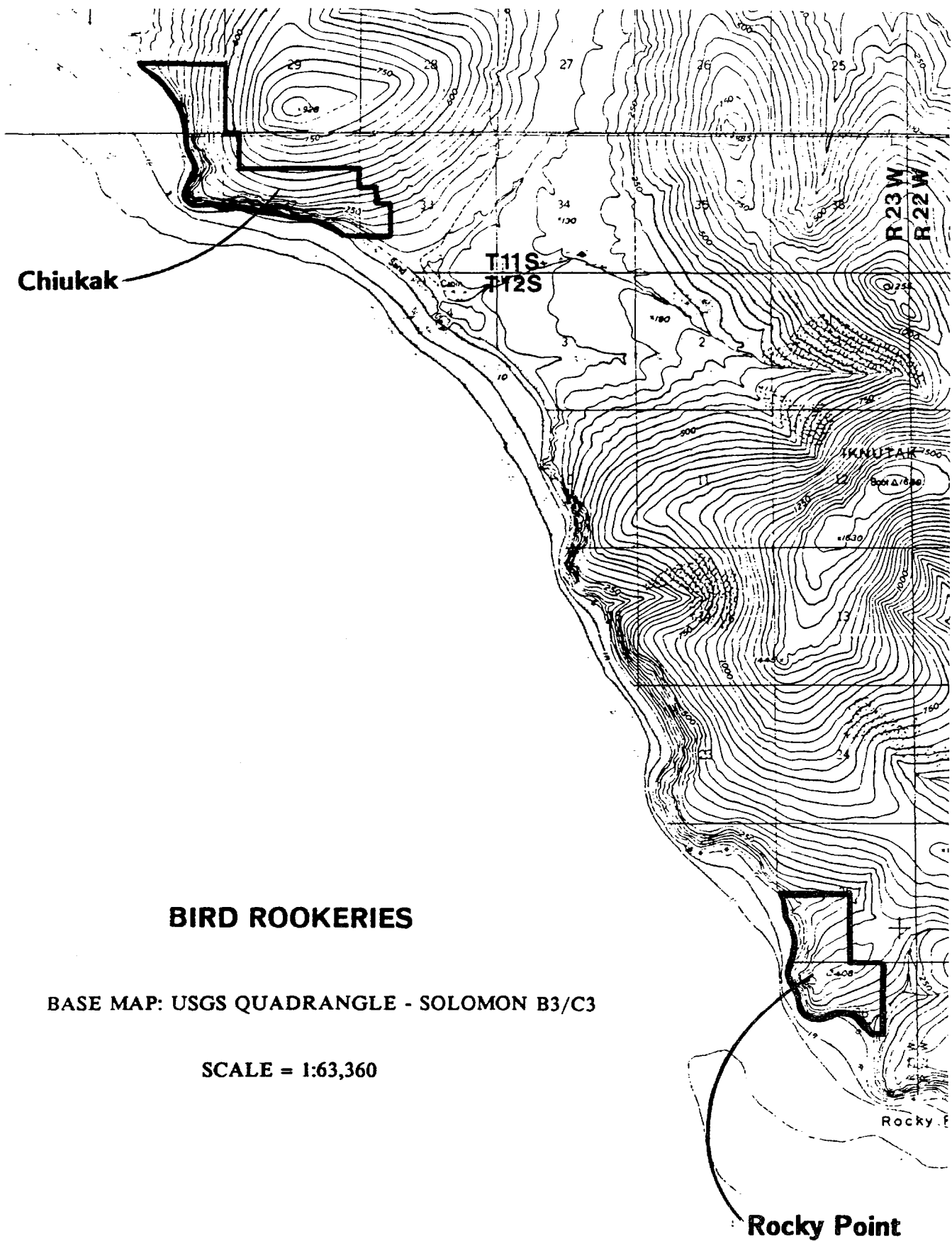


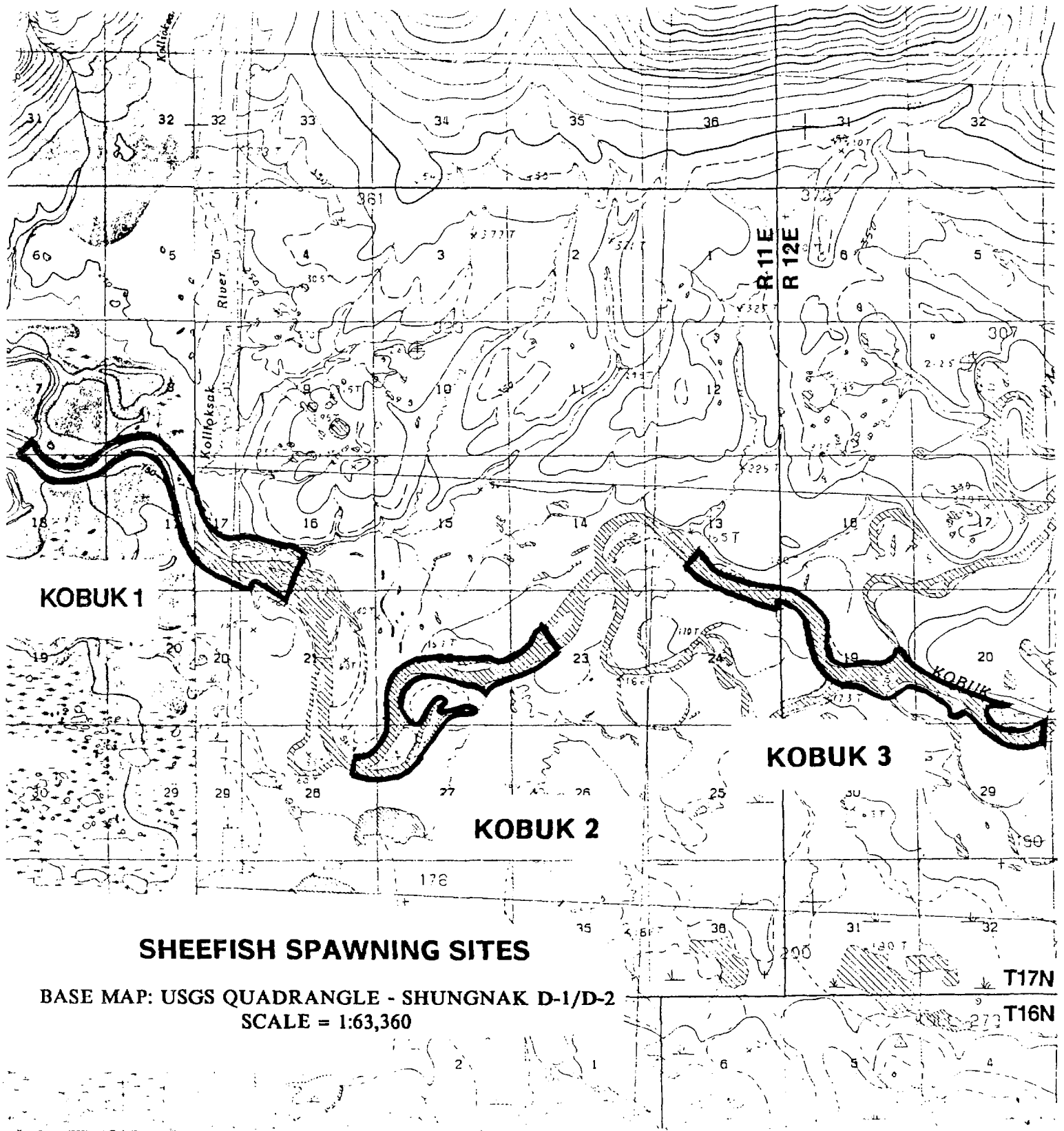
Eldorado Creek

Bluff

T O N

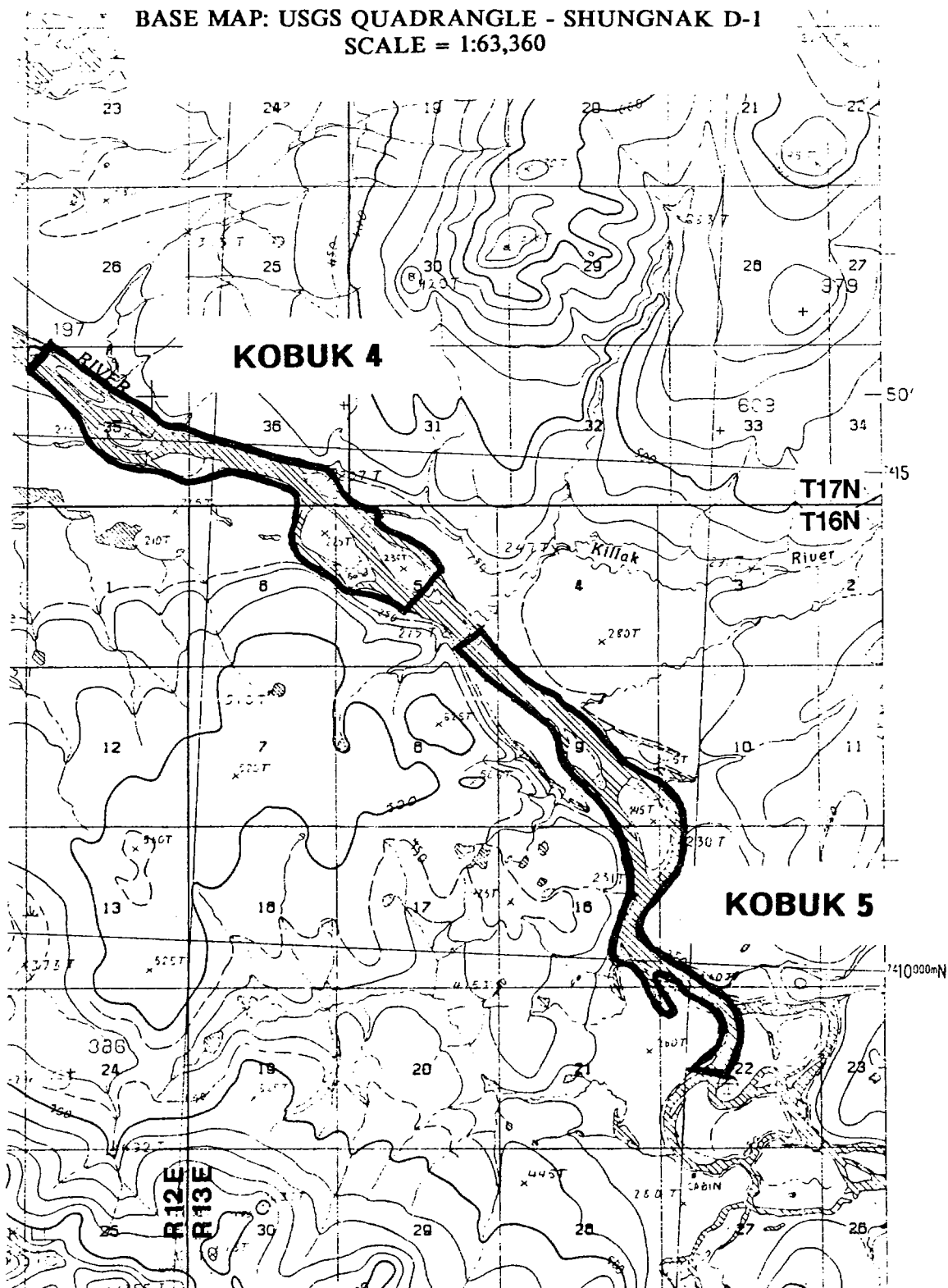
S O U N D

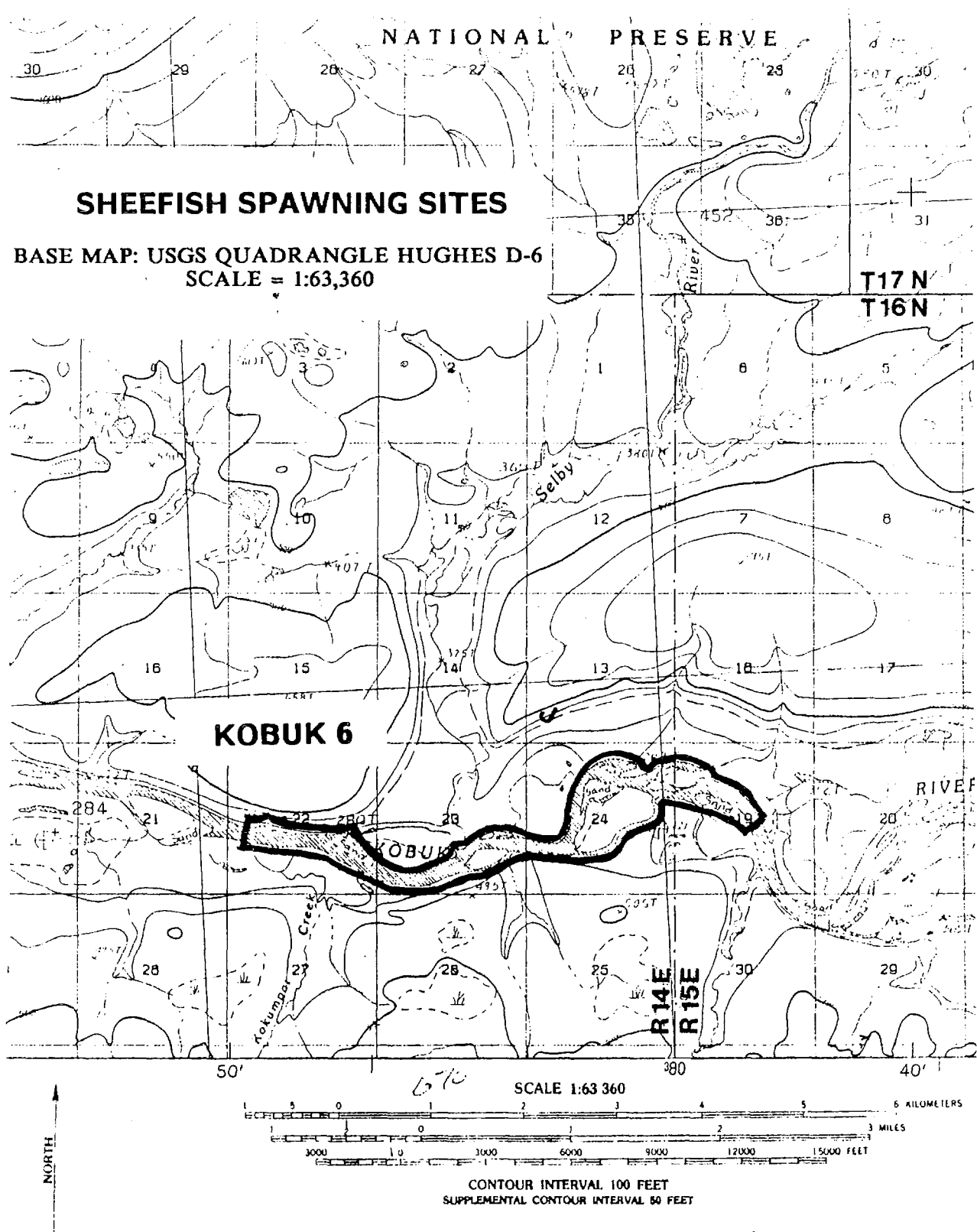


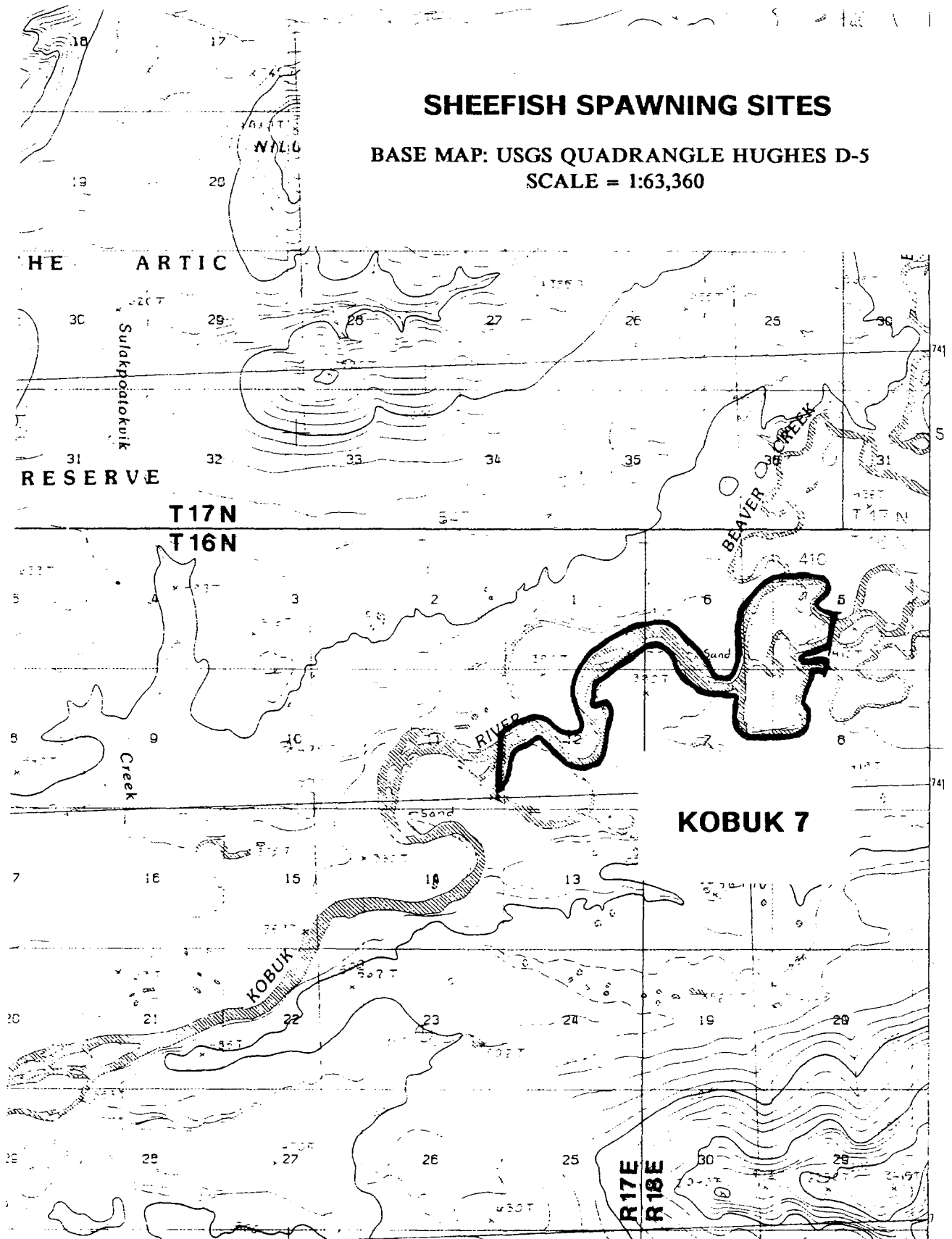


SHEEFISH SPAWNING SITES

BASE MAP: USGS QUADRANGLE - SHUNGNAK D-1
SCALE = 1:63,360







Appendix I

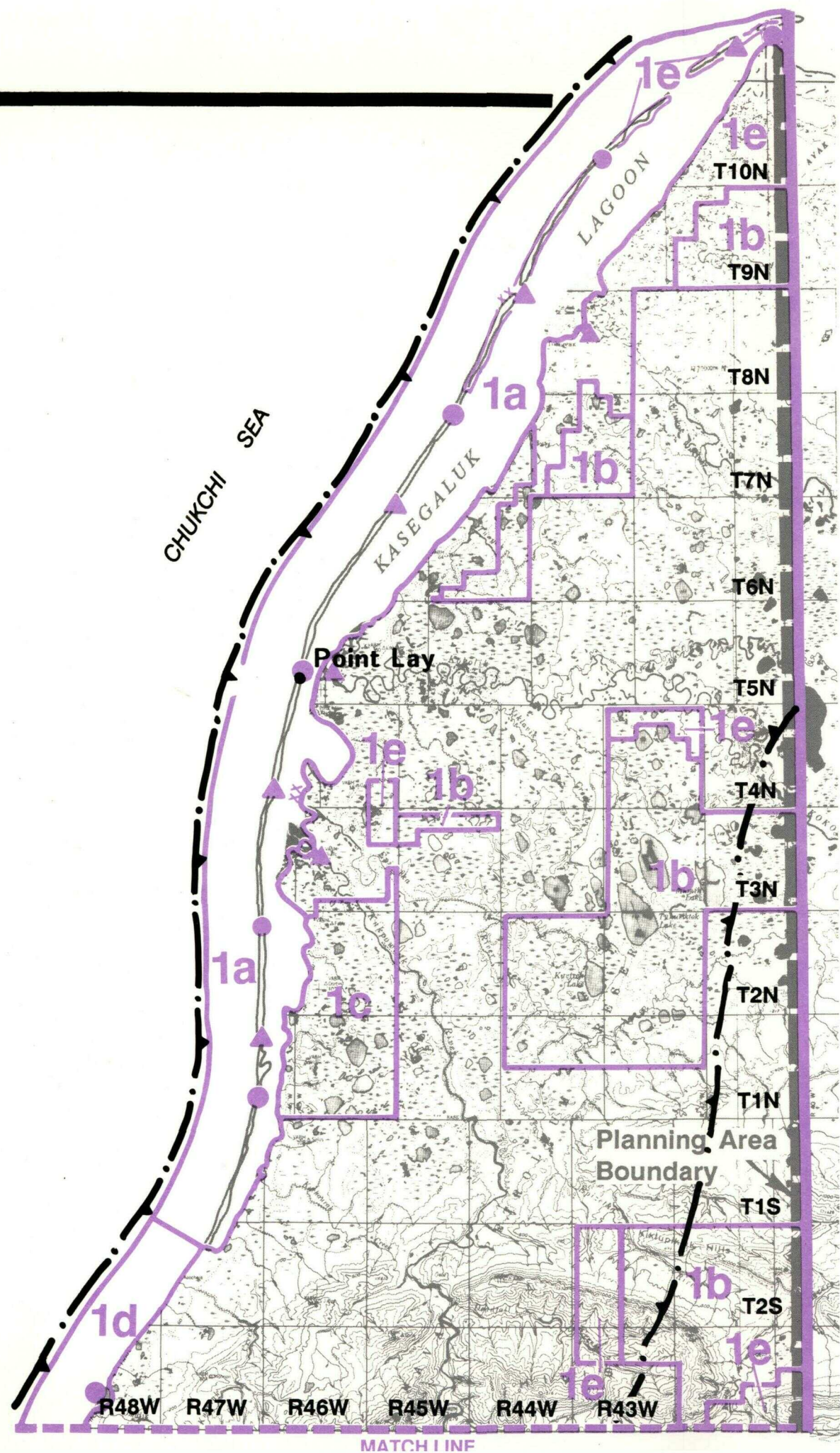
LISTING OF KEY AGENCIES & PHONE NUMBERS

State Agencies	Location	Phone Number
Cooperative Extension Service	Nome Fairbanks	443-2320 474-7246
Dept. of Community and Regional Affairs	Nome Kotzebue Fairbanks	443-5457 442-3696 452-7126
Dept. of Environmental Conservation	Nome Fairbanks	443-2600 452-2340
Dept. of Fish and Game	Nome Kotzebue	443-2825
Habitat Division	Fairbanks	451-6192
Division of Boards	Kotzebue	
Dept. of Natural Resources		
Div. of Agriculture	Fairbanks	451-2780
Div. of Forestry	Fairbanks	451-2660
Div. of Geophysical and Geological Surveys	Fairbanks	451-2760
Div. of Land and Water	Fairbanks	451-2700
Div. of Mining	Fairbanks	451-2790
Div. of Oil and Gas	Anchorage	762-2547
Parks and Outdoor Recreation	Fairbanks	451-2695
Resource Allocation Section	Fairbanks	451-2742
Dept. of Transportation and Public Facilities	Nome Fairbanks	443-5266 451-2210
Office of Management and Budget		
Division of Governmental Coordination	Juneau Fairbanks	465-3562 451-2818
Office of the Ombudsman, Interior and Northern Alaska		800-478-3257

LISTING OF KEY AGENCIES & PHONE NUMBERS, Appendix I

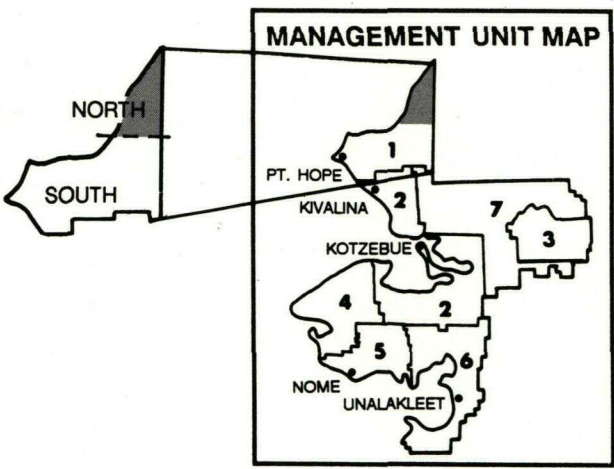
Federal Agencies	Location	Phone Number
<hr/>		
USDA Soil Conservation Service	Fairbanks	479-6767
	Anchorage	261-2424
USDI Bureau of Land Management	Kotzebue	442-3430
	Nome	443-2177
Arctic District	Fairbanks	474-2300
Kobuk District	Fairbanks	474-2330
Northwest Resource Area	Fairbanks	474-2355
USDI National Park Service		
Bering Land Bridge	Nome	443-5822
Northwest Areas	Kotzebue	442-3890
Gates of the Arctic	Fairbanks	456-0281
USDI Fish and Wildlife Service	Anchorage	786-3519
Alaska Maritime National Wildlife Refuge	Homer	253-6546
Selawik National Wildlife Refuge	Kotzebue	442-3799

LISBURNE
COASTAL PLAN
BOUNDARIES



LEGEND

- Management Unit Boundary
- 1a Subunit Boundary
- North Slope Borough Coastal Area Boundary
- Bird Rookeries
- Anadromous Stream Mouths or Enclosed Estuaries
- Marine Mammal Haulouts



Map Scale:
1:500,000



U.S.G.S. Quads:
Wainwright
Point Lay

COASTAL PLAN BOUNDARIES

LEGEND

Management Unit Boundary

Subunit Boundary

North Slope Borough Coastal Area Boundary

x

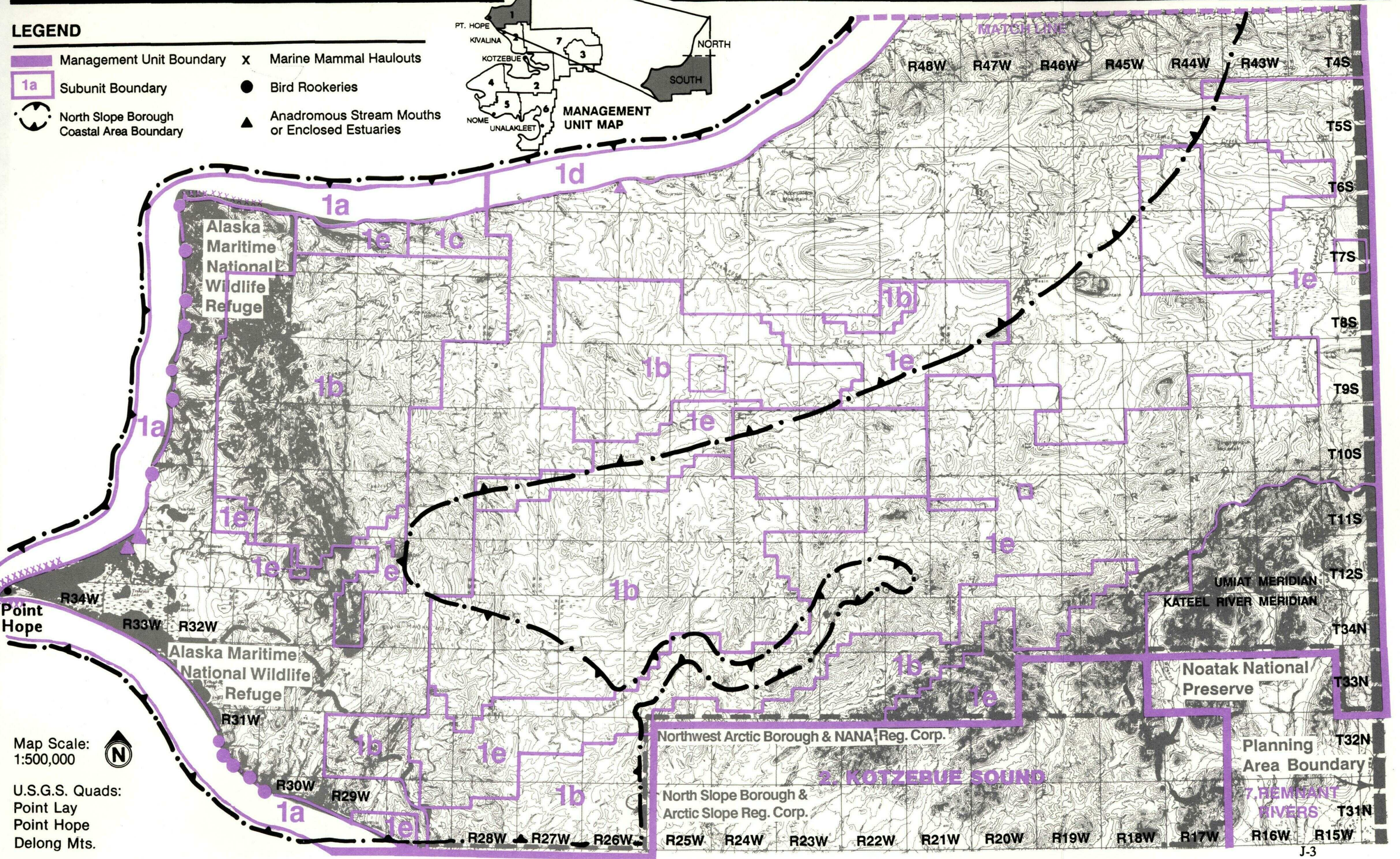
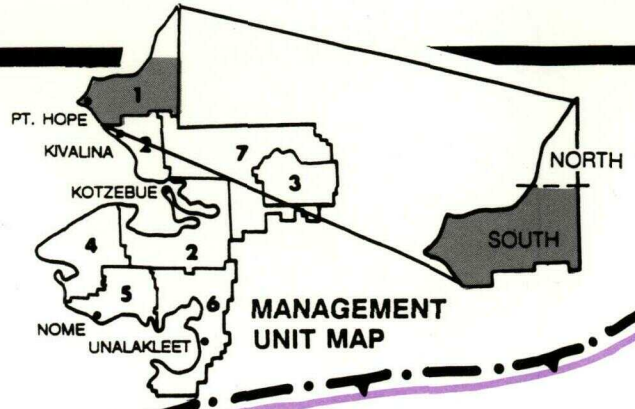
●

▲

Marine Mammal Haulouts

Bird Rookeries

Anadromous Stream Mouths or Enclosed Estuaries



Map Scale:
1:500,000

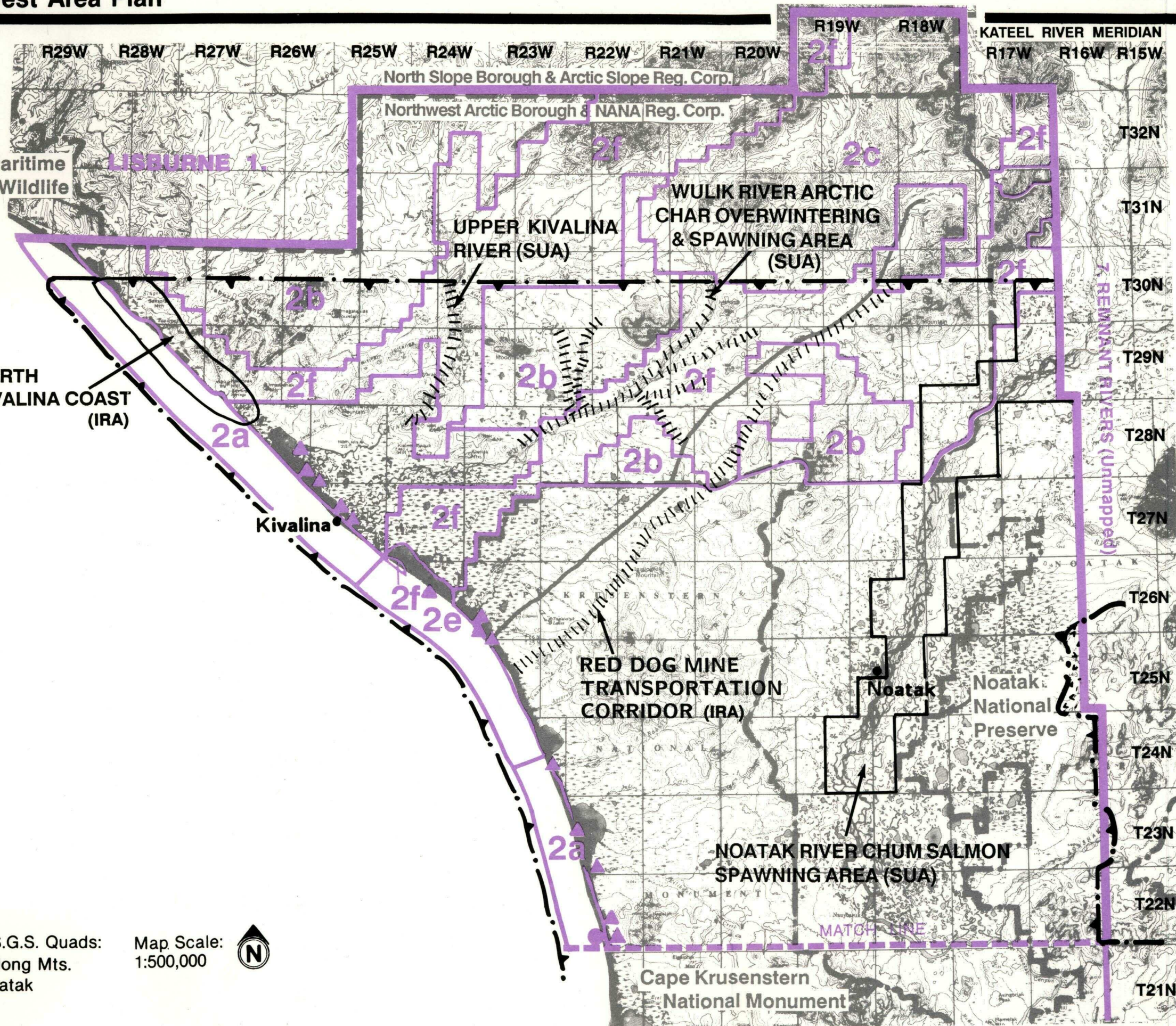
U.S.G.S. Quads:
Point Lay
Point Hope
Delong Mts.

Alaska Maritime
National Wildlife
Refuge

NORTH
KIVALINA COAST
(IRA)

U.S.G.S. Quads:
Delong Mts.
Noatak

Map Scale:
1:500,000



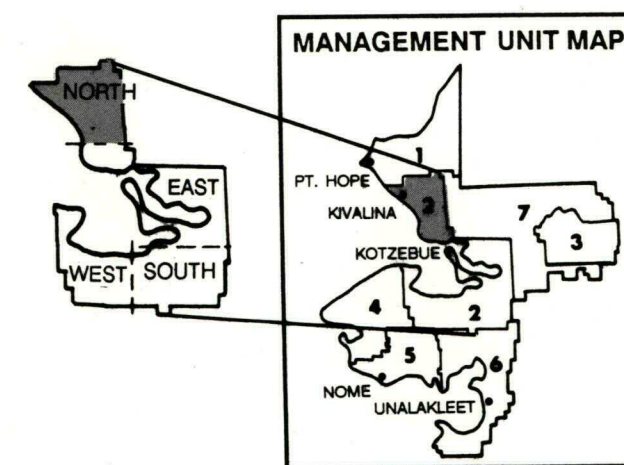
KOTZEBUE SOUND

COASTAL PLAN

BOUNDARIES

LEGEND

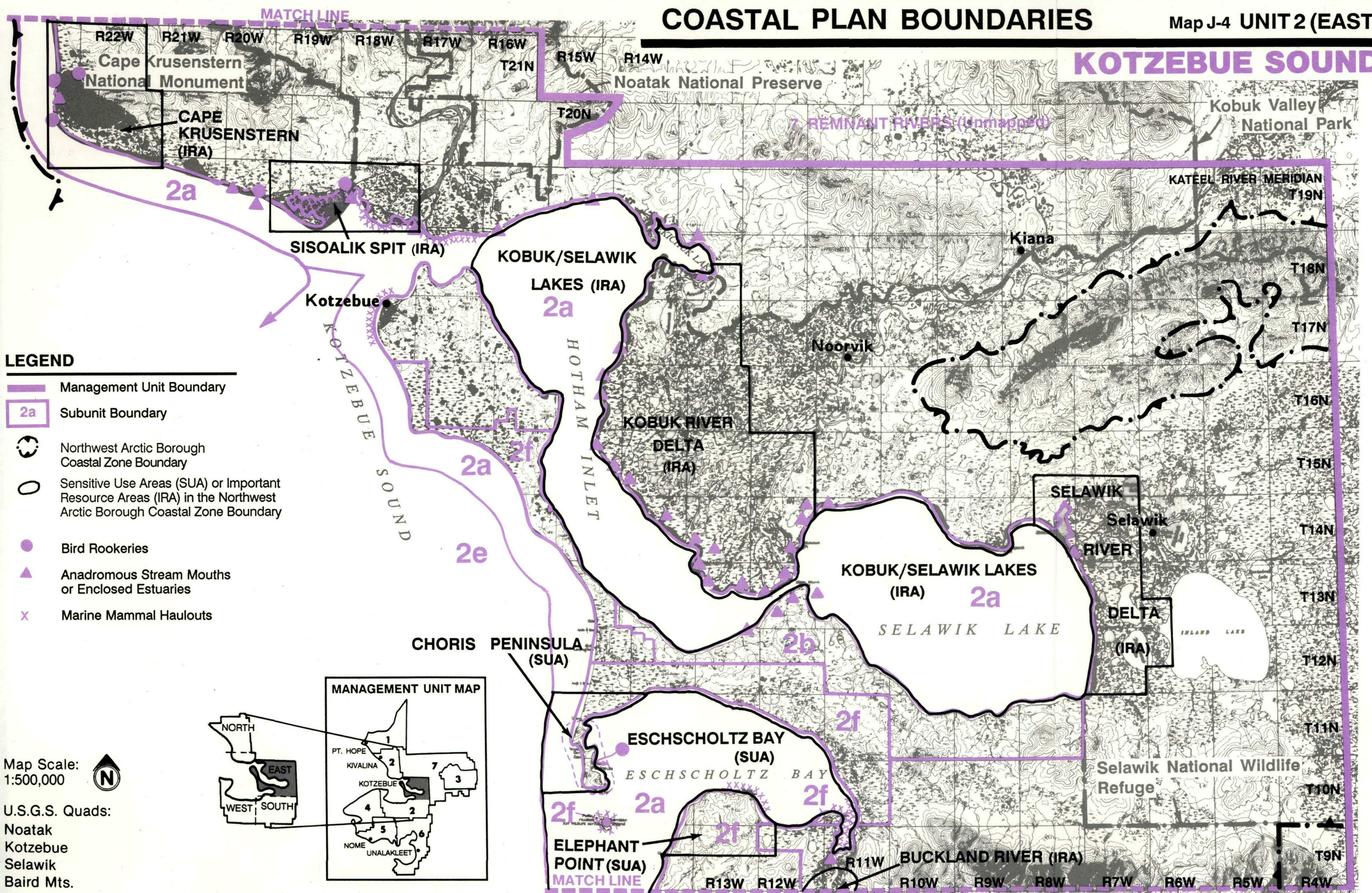
- Management Unit Boundary
- Subunit Boundary
- Northwest Arctic Borough Coastal Zone Boundary
- Sensitive Use Areas (SUA) or Important Resource Areas (IRA) in the Northwest Arctic Borough Coastal Zone Boundary
- Permit Notification Area
- Bird Rookeries
- Anadromous Stream Mouths or Enclosed Estuaries
- Marine Mammal Haulouts



COASTAL PLAN BOUNDARIES

Map J-4 UNIT 2 (EAST)

KOTZEBUE SOUND

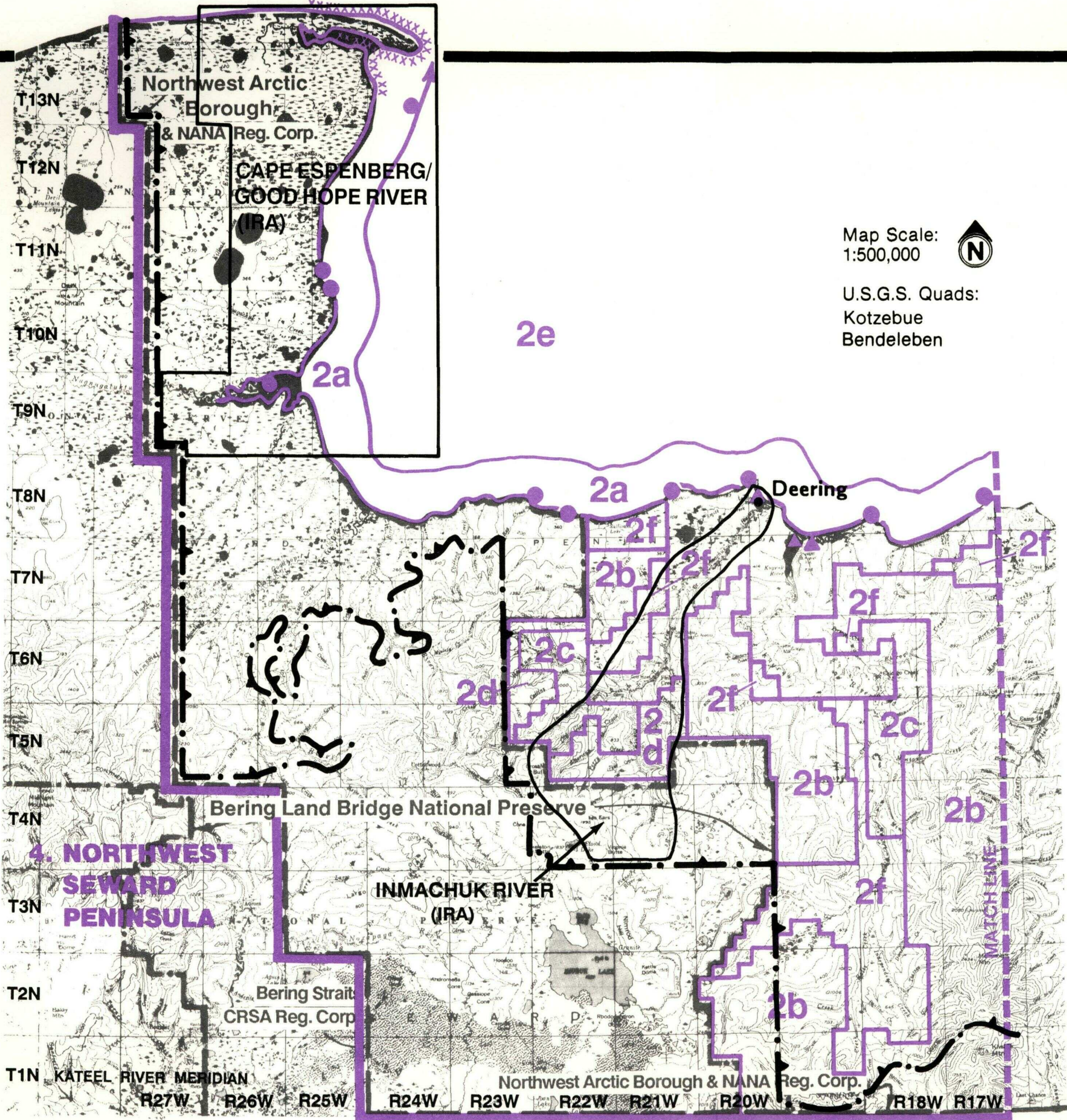




KOTZEBUE SOUND

COASTAL PLAN
BOUNDARIES

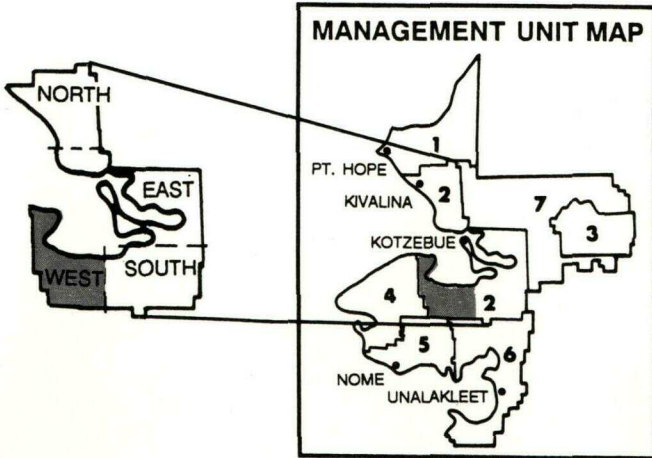
Northwest
Area Plan

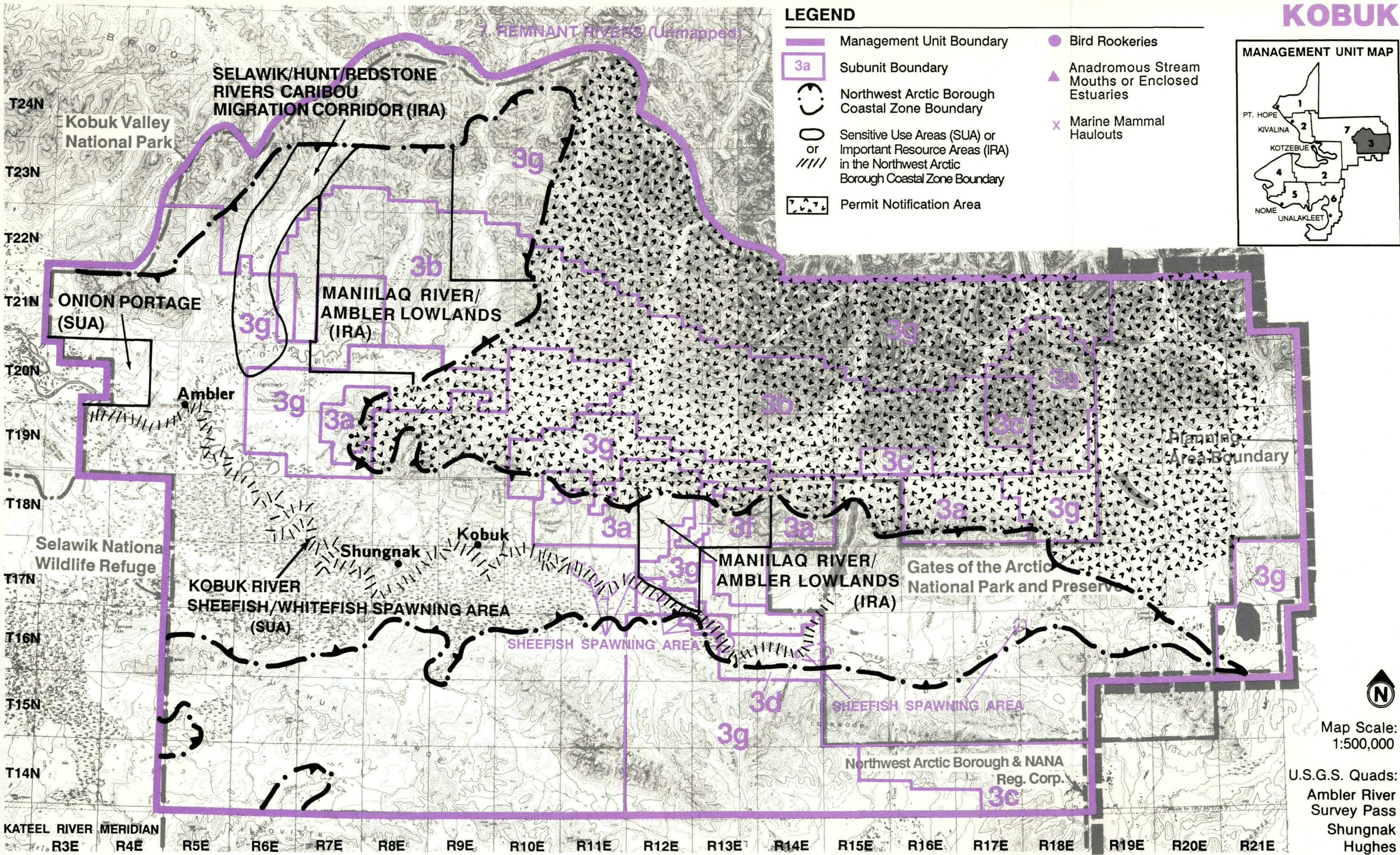


Map Scale:
1:500,000

U.S.G.S. Quads:
Kotzebue
Bendeleben

- LEGEND**
- Management Unit Boundary
 - 2a Subunit Boundary
 - Northwest Arctic Borough Coastal Zone Boundary
 - Sensitive Use Areas (SUA) or Important Resource Areas (IRA) in the Northwest Arctic Borough Coastal Zone Boundary
 - Bird Rookeries
 - Anadromous Stream Mouths or Enclosed Estuaries
 - Marine Mammal Haulouts



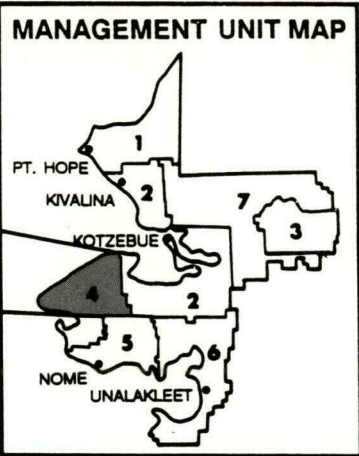


Northwest Area Plan

Map J-8 UNIT 4(NORTH)

LEGEND

- Management Unit Boundary
- 4a Subunit Boundary
- Bering Straits CRSA Coastal Zone Boundary
- Important Use Areas in the Bering Straits CRSA
- Permit Notification Area
- Bird Rookeries
- Marine Mammal Haulouts
- Anadromous Stream Mouths or Enclosed Estuaries



NORTHWEST SEWARD PENINSULA

COASTAL PLAN BOUNDARIES

Map Scale: 1:500,000

U.S.G.S. Quads: Bendeleben Kotzebue Shishmaref Teller

2.KOTZEBUE SOUND

KATEEL RIVER MERIDIAN Northwest Arctic Borough & NANA Reg. Corp.

IKPEK LAGOON & NULUK, PINGUK, KAGUERAK, & KUGRUPAGA RIVERS

LOPP LAGOON/ CAPE PRINCE OF WALES

Shishmaref

SERPENTINE RIVER

ARCTIC RIVER

Bering Land Bridge National Preserve

Bering Straits CRSA & Reg. Corp.

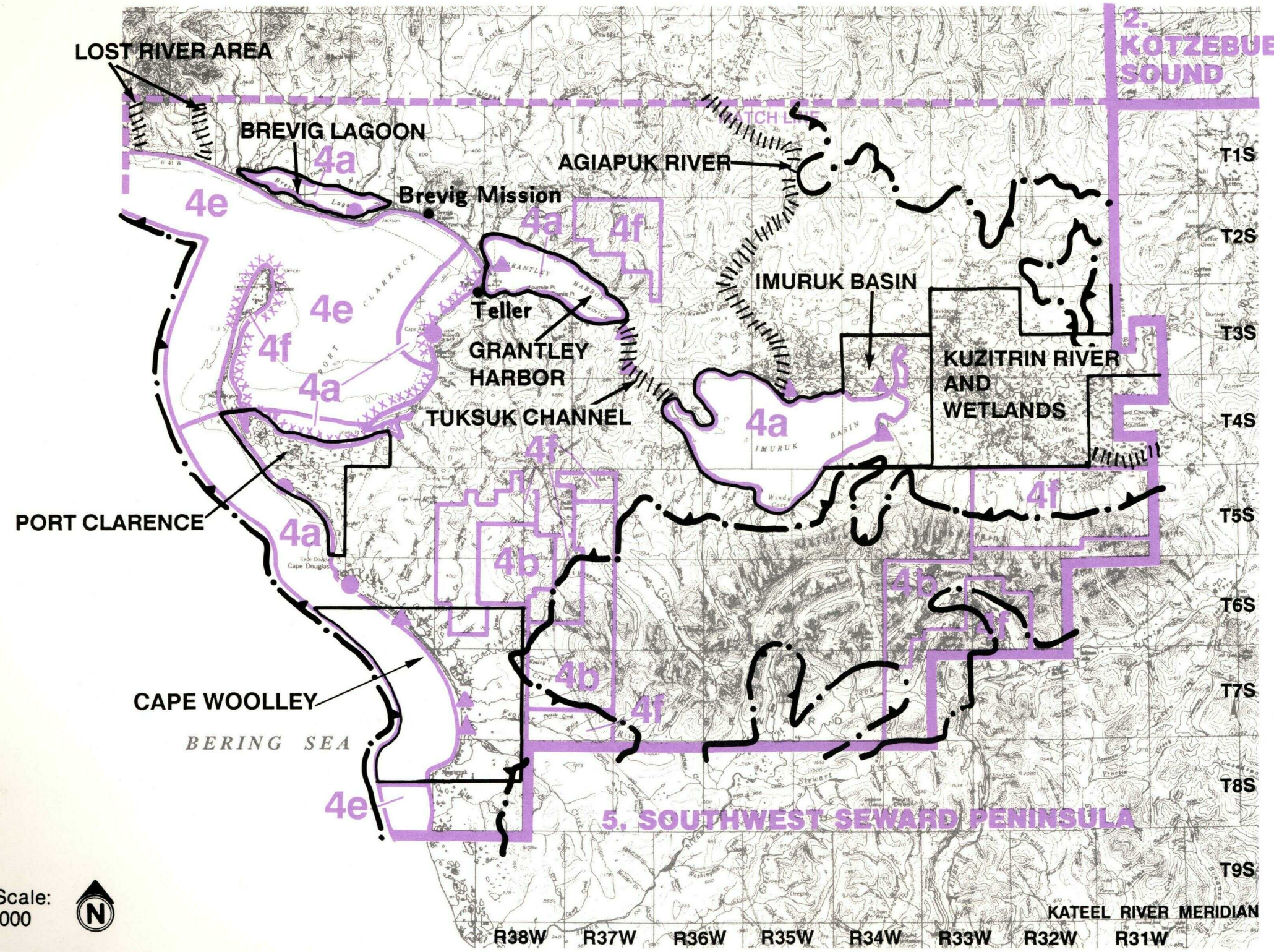
AGIAPUK RIVER

LOST RIVER AREA

Ak. Maritime Natl. Wildlife Ref.

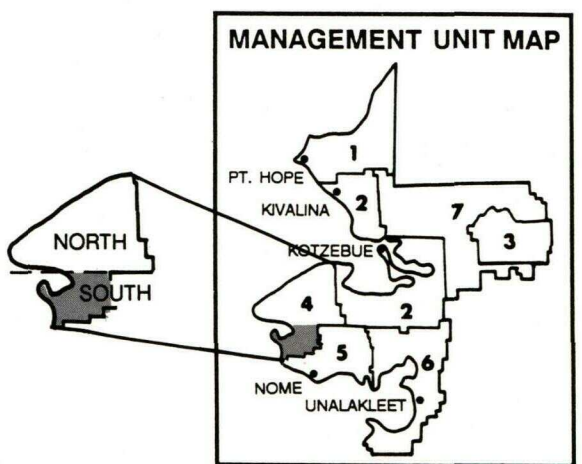
R40W R39W R38W R37W R36W R35W R34W R33W R32W R31W R30W R29W R28W R27W R26W R25W J-15

NORTHWEST
SEWARD PENINSULA
COASTAL PLAN
BOUNDARIES



LEGEND

- Management Unit Boundary
- 4a Subunit Boundary
- Bering Straits CRSA Coastal Zone Boundary
- Important Use Areas in the Bering Straits CRSA
- Permit Notification Area
- Bird Rookeries
- Marine Mammal Haulouts
- Anadromous Stream Mouths or Enclosed Estuaries



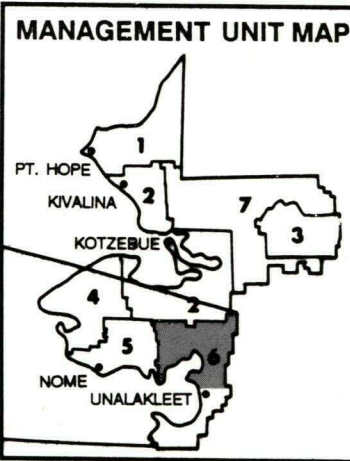
Map Scale: 1:500,000

U.S.G.S. Quads: Nome Teller

NORTON
SOUND

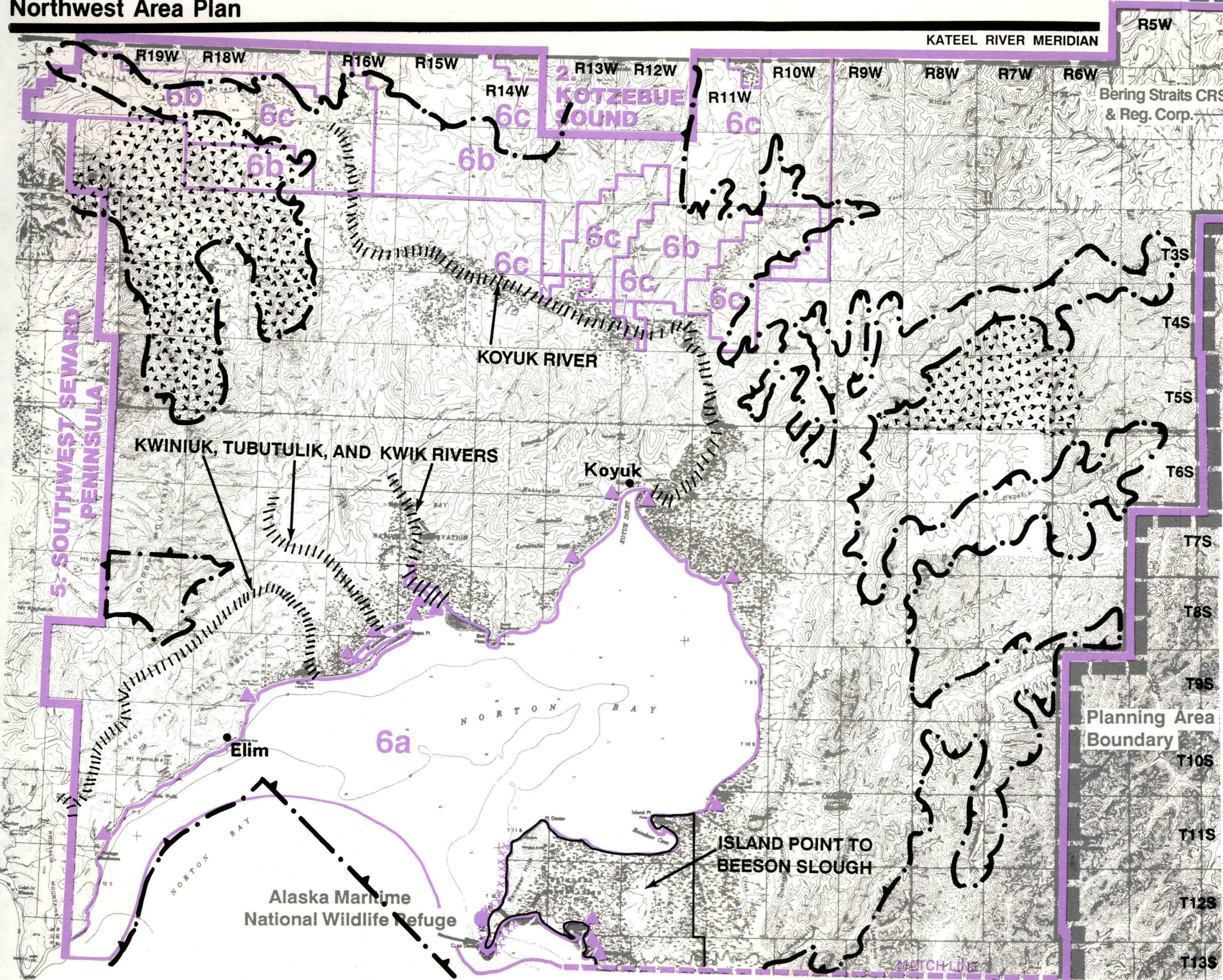
COASTAL PLAN
BOUNDARIES

- LEGEND
- Management Unit Boundary
 - 6a Subunit Boundary
 - Bering Straits CRSA Coastal Zone Boundary
 - Important Use Areas in the Bering Straits CRSA
 - Permit Notification Area
 - Bird Rookeries
 - Marine Mammal Haulouts
 - Anadromous Stream Mouths or Enclosed Estuaries











Map Scale: 1:500,000

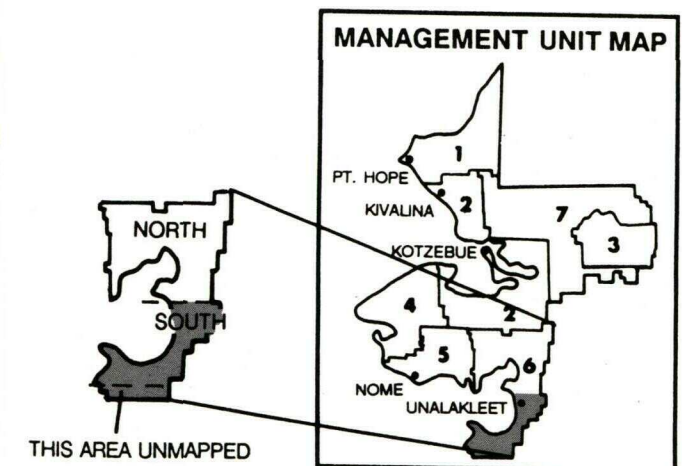
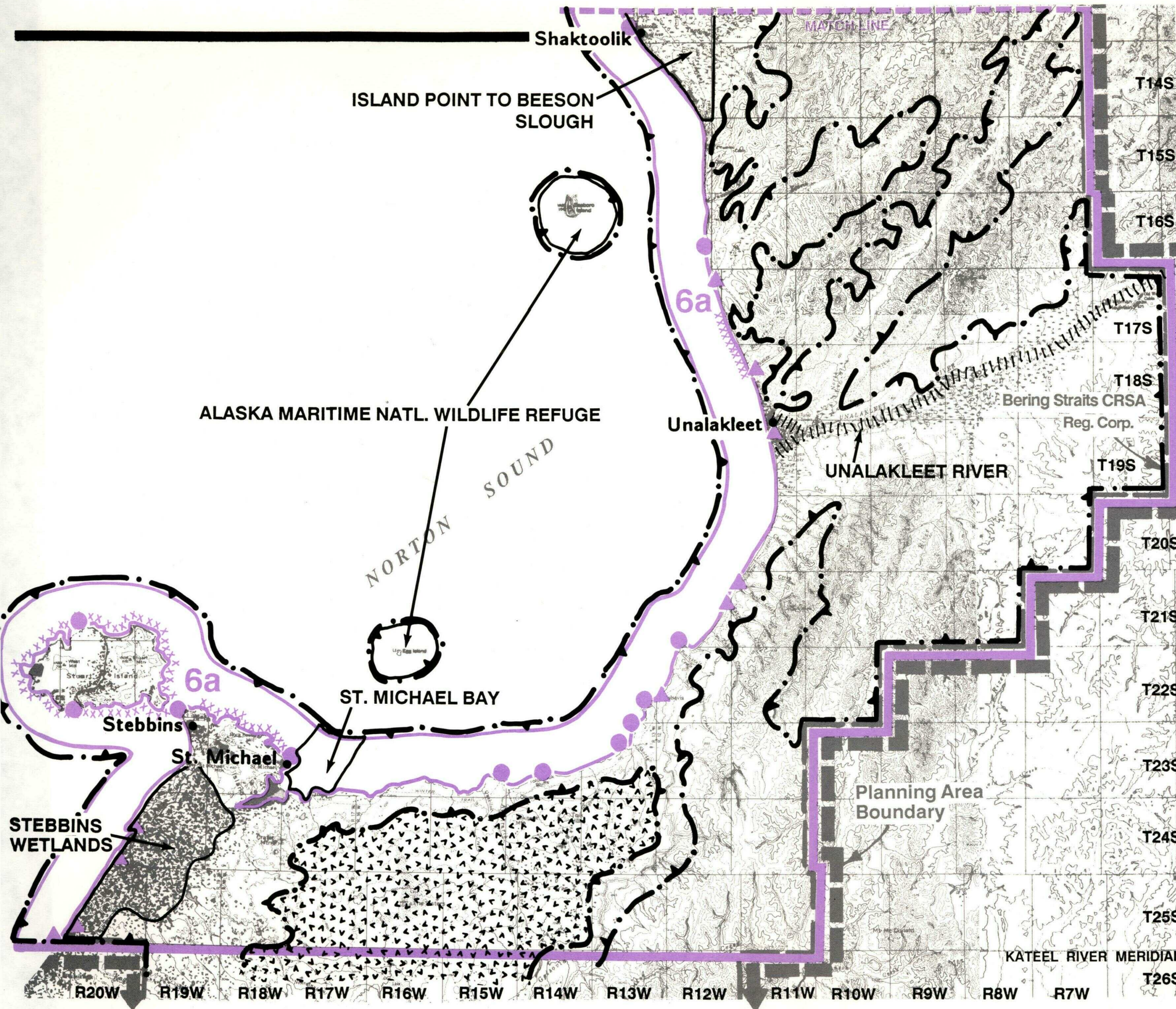
U.S.G.S. Quads:
Candle Norton Bay
Solomon Bendeleben



NORTON SOUND COASTAL PLAN BOUNDARIES

LEGEND

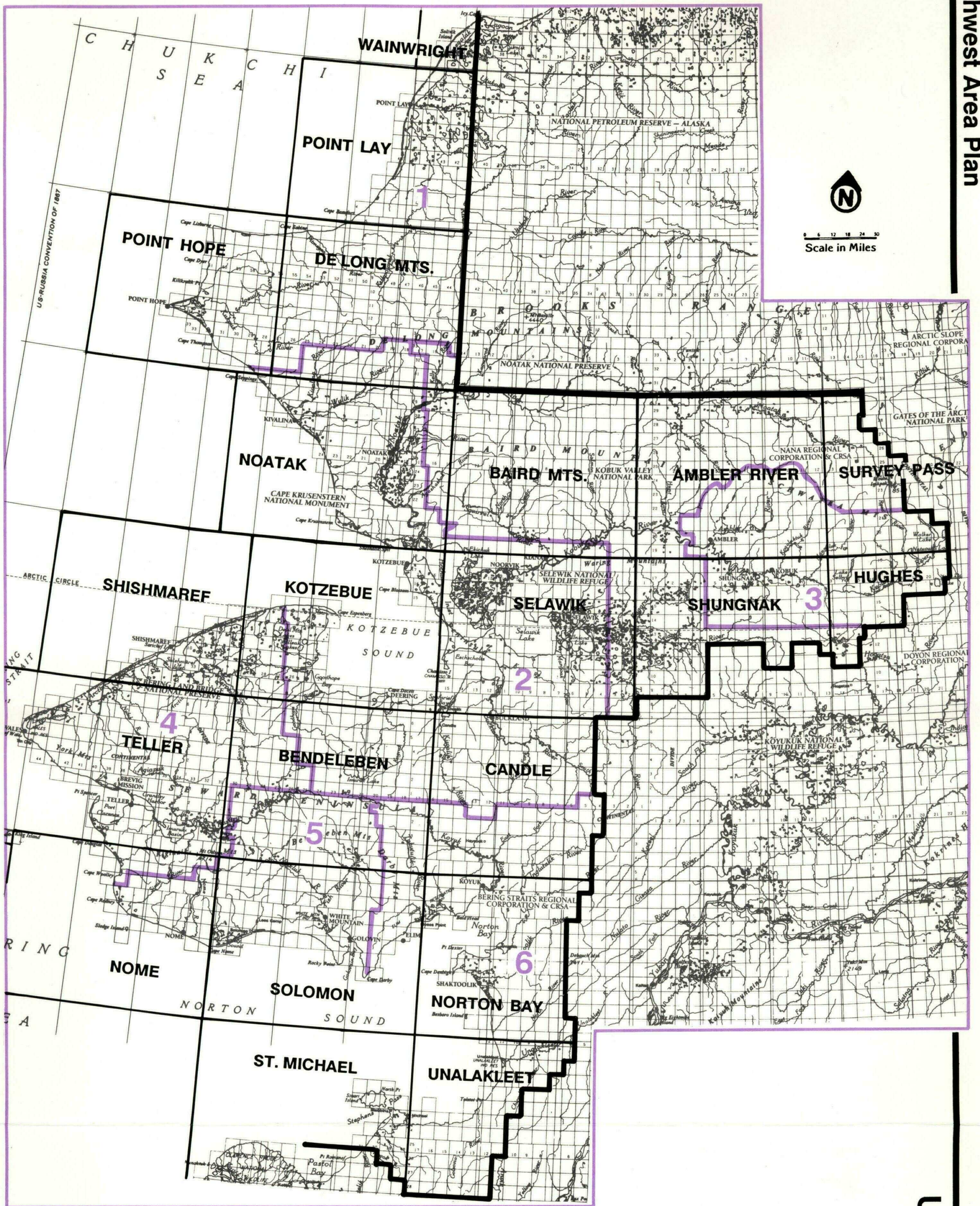
-  Management Unit Boundary
-  Subunit Boundary
-  Bering Straits CRSA Coastal Zone Boundary
-  Important Use Areas in the Bering Straits CRSA
-  Permit Notification Area
-  Bird Rookeries
-  Marine Mammal Haulouts
-  Anadromous Stream Mouths or Enclosed Estuaries



Map Scale:
1:500,000



U.S.G.S. Quads:
Norton Bay



- MANAGEMENT UNIT BOUNDARY
- PLANNING AREA BOUNDARY
- U.S.G.S. 1:250,000 QUADRANGLE MAP BOUNDARY

U.S.G.S. 1:250,000
QUADRANGLE
MAP INDEX

Appendix L

INDEX

A

- A-1 Habitat lands, D-1, D-5
 - definition, A-2
- A-2 Habitat lands, D-1, D-5
 - definition, A-2
- AAC
 - definition, A-1
- Access, 1-5, 2-12, 2-15, 2-18, 2-20, 2-21, 2-23, 2-25, 2-40, 2-43, 2-45, 2-46, 3-4, 3-48, 4-8, 4-9
 - 17(b) Easements, 2-20, 4-8,
 - community notice, 2-5
 - for settlement, 2-31, 2-32
 - goals, 2-20
 - guidelines, 2-20, 2-21
 - see also Resource Information Summary charts and Background for each Management Unit in chapter 3
 - see also Easements, Trails, and Transportation
- Acknowledgements, i, ii
- ACMP. See Alaska Coastal Management Program
- Acronyms, Appendix A
- Advisory Committee, i, ii
- Agiapuk River, 3-45, 3-46, 3-47
- AHRS. See Alaska Heritage Resource Survey
- Airports. See Airstrips
- Airstrips, 2-19, 2-25, 3-9, 3-20, 3-37, 3-46, 3-58, 3-69
 - see also Resource Information Summary charts for each Management Unit in Chapter 3
- Akalolik, 3-9
- Akunik Pass, 3-11
- Alaska Boards of Fisheries and Game, 1-8, 2-43
- Alaska Coastal Management Program, 1-14
 - see also Coastal management plans
- Alaska Coastal Policy Council, 1-14
- Alaska Heritage Resource Survey, 2-14
- Alaska Interagency Fire Management Council, 2-10
- Alaska Maritime National Wildlife Refuge, 1-2, 3-9, 3-45, 3-57, B-2
- Alaska Native Claims Settlement Act, 2-14, 2-22, 2-23, 4-7
 - regional corporations, 1-2, 1-6, 1-11
- Alaska Soil and Water Conservation District, 1-8, 2-12, 2-13, 4-8
- Alatna River, 3-38
- Ambler, 1-9, 3-37 - 3-44, 4-1
 - see also Resource Information Summary Charts for Management Units 1 and 2
- Ambler-Bornite mineral district, 2-50, 3-6, 3-37
- Ambler River, 1-2, 3-37, 3-42
- Amendments, 4-6
 - see also Northwest Area Plan
- American River, 3-45
- American River Trail, 4-2
- AMSA. See Areas Meriting Special Attention
- Anadromous fish streams, 1-11, 2-8, 2-9, 2-18, 2-23, 2-24, 2-41, 2-57, 3-10, 3-22, 3-47, 3-60
 - definition, A-1
 - see also Fish and wildlife habitat, see also Resource Information Summary charts and Management Guidelines for each Management Unit in Chapter 3
- Anaktuvuk, 3-50, 3-51
- ANCSA. See Alaska Native Claims Settlement Act
- ANCSA 14(h)1 site, 2-14
- Anirak Lake, 3-38
- Anvik River, 3-69
- Arctic Lagoon, 3-45, 3-47

Arctic River, 3-45, 3-47
Arctic Slope Regional Corporation, ii, 3-11, 4-1
Areas Meriting Special Attention, 3-10, 3-20,
3-39, 3-47, 3-59, 3-70
AS
 definition, A-1
Avaraart Lake, 3-38
Ayugatak River, 3-9

B

B-1 Habitat lands, D-1, D-5
 definition, A-2
B-2 Habitat lands, D-1, D-5
 definition, A-2
Baldwin Peninsula, 3-31
 see also Resource Information Summary charts
 for Management Unit 2
Barrow, 3-50, 3-51
Bear. See Fish and wildlife habitat, and
 Resource Information Summary charts for
 each Management Unit in Chapter 3
Belukha whales. See Fish and wildlife habitat
 and Subsistence
Bering Land Bridge National Preserve, 1-2,
3-45, 3-57, B-5
Bering Straits Coastal Management Program,
ii, 1-14, 2-5, 2-43, 3-46, 3-47, 3-58, 3-70,
Appendix J
Bering Straits Coastal Resource Service Area,
iii, 1-10, 1-14, 2-59, 3-46, 3-59, Appendix J, B-7
Bering Straits Native Corporation, ii, 1-10,
3-57, 3-59, B-1
Bibliography, Appendix C
Big Hurrah Prospect, 2-50
Bird rookeries. See Seabird colonies
BLM. See Bureau of Land Management
Black Dome, 3-46
Bluestone River, 3-47
Bluff, 3-59, Appendix H
Bonanza River, 1-12, 1-13, 3-60

Bornite. See Ambler-Bornite mineral district
Bowhead whales. See Fish and wildlife habitat,
 and Subsistence
Brevig Lagoon, 3-47
Brevig Mission, 3-45 - 3-56
 see also Resource Information Summary charts
 for Management Units 4 and 5
Brooks Range, 2-24, 2-50, 3-37
BSCMP. See Bering Straits Coastal
 Management Program
BSCRSA. See Bering Straits Coastal Resource
 Service Area
BSNC. See Bering Straits Native Corporation
Buckland, 3-19 - 3-36, 4-1, 4-2
 see also Resource Information Summary charts
 for Management Unit 1 and 2
Buckland River, 3-19 - 3-36, 4-2
Buffers, 2-15, 2-17, 2-31, 2-39, 2-40, 2-41, 2-53,
2-54, 2-59, 2-60
Bunker Hill, 1-9, 1-10
Bureau of Land Management, 1-2, 3-11, 4-1,
B-2, I-2

C

C Habitat lands, D-1, D-5
 definition, A-2
Cape Darby, 3-57, 3-69
Cape Denbigh, 3-70
Cape Espenberg, 3-19, 3-21, 3-45
Cape Krusenstern, 3-21
Cape Krusenstern National Monument, 1-2,
3-19, I-2
Cape Lisburne, 3-9
Cape Nome, 3-59
Cape Prince of Wales, 3-47
Cape Seppings, 3-19
Cape Thompson, 3-9, 3-10
Cape Wooley, 3-45, 3-57

Cape York, 3-45, 3-47, Appendix H

Caribou. See Fish and wildlife habitat, Subsistence, and Resource Information Summary charts for each Management Unit in Chapter 3

Carson Creek, 3-71

Casadapega River, 1-12, 1-13, 2-50, 3-57

Chamisso Island, 3-31

Cheenik River, 3-60

Chicago Creek, 2-50, 2-56, 3-6, 3-20, 3-28, 4-2

Chiukak, 3-59, Appendix H

Choris Peninsula, 3-20, Appendix H

Christian Creek settlement area, 1-9, 1-10, 2-30, 2-33, 3-58 - 3-60, 3-66

Chukchi Sea, 3-20

Chukchi Basin, 2-48

Classifications. See Land use classifications

Citizen Participation. See Public Notice and Northwest Area Plan

Closed to Mineral Entry definition, A-1

CMP. See Coastal Management Plan

Coal, 2-9, 2-31, 3-9, 3-10
see also Subsurface resources and Mineral closures
see also Resource Information Summary charts for each Management Unit in Chapter 3

Coal Lands, 3-6, 4-2, G-1

Coastal districts, 1-14, 2-22, 2-23, 2-45, 2-46, 2-48, 2-54, 2-55, 2-56, 2-57, 2-60

Coastal management plans, 1-12, 1-14, 2-23, 2-43, 2-57, 2-60, 3-10, 3-20, 3-38, 3-46, 3-58, 3-70, 3-80, Appendix J

Coastal Resource Service Area, 1-14

Cobblestone River, 3-47

Colville Basin, 2-50

Commercial Recreation. See Recreation

Community Notice
See Public Notice

Consultation
definition, A-1

Cooperative agreements, 4-8

Cooperative Extension Service, I-1

Coordination, 2-5, 2-29, 2-37, 3-6
coastal plan, 2-5
guidelines, 2-5
non-state landowner, 2-5
upland owner and tideland applicant, 2-5

Corwin Bluffs, 2-48, 2-50, 2-50, 3-10, 3-14, Appendix H

Council, 2-50, 3-57 - 3-68
see also Resource Information Summary charts for Management Unit 5

Cripple Creek, 3-60

CRSA. See Coastal Resource Service Area

Cultural resources. See Heritage Resources

D

Dall sheep. See Fish and wildlife habitat, and Resource Information Summary charts for each Management Unit in Chapter 3

DCRA. See Department of Community and Regional Affairs

DEC. See Department of Environmental Conservation

Deering, 3-19 - 3-36
see also Resource Information Summary charts for Management Units 1, 2, and 3

Deering-Inmachuk Road, 3-20

Delong Mountains, 3-19

Department of Community and Regional Affairs, i, B-1, I-1

Department of Environmental Conservation, i, 2-8, 2-25, 2-32, 2-37, 2-40, 2-41, 2-46, 2-48, 2-58, I-1

Department of Fish and Game, i, ii, 1-8, 1-9, 2-6, 2-7, 2-8, 2-12, 2-13, 2-17, 2-22, 2-23, 2-46, 2-48, 2-49, 2-53, 2-55, 2-57, 4-5, I-1

Department of Military and Veterans Affairs, 1-11

Department of Natural Resources, i, iii, I-1

Department of Transportation and Public Facilities, i, 2-19 2-20, 2-54, 2-55, 2-56, 2-57, 2-58, I-1

Designations. See Land use designations

DF&G. See Department of Fish and Game

Diomedes Island, 3-45

Directory of State Agencies, Appendix I

Disposals. See Settlement

Division of Agriculture, i, I-1

Division of Forestry, i, 2-8, 2-10, 2-25, 2-48, I-1

Division of Geological and Geophysical Surveys, i, iii, I-1

Division of Land and Water Management, i, iii, 2-10, 2-15, 2-25, 2-29, 2-32, 2-49, 2-56, 4-6, 4-7, I-1

Division of Mining, i, iii, 1-10, 3-60, I-1

Division of Oil and Gas, i, iii, 1-12, 2-48, 2-49, I-1

Division of Parks and Outdoor Recreation, i, iii, 2-23, 2-54, 2-57, I-1

DNR. See Department of Natural Resources

Docks, 2-15, 2-41

DOT&PF. See Department of Transportation and Public Facilities

Driftwood, 2-10, 2-11

Ducks. See Fish and wildlife habitat, and Resource Information Summary charts for each Management Unit in Chapter 3

E

Eagles. See Fish and wildlife habitat

Ear Mountain, 2-50, 3-46, 4-2

Easements, 2-15, 2-31, 2-32, 2-39, 2-40, 2-41, 2-53, 2-54, 2-60, 4-8, 4-9
17(b), 2-20, 4-8, 4-9
definition, A-1
RS 2477, 2-20, 4-9
see also Access, Trails

Easement atlases, 4-8, C-2

Economic development, 1-7, 2-17, 2-22, 2-28, 2-45

Egavik River, 3-69, 3-71

Eldorado Creek, 3-59, 3-60, Appendix H

Eldorado River, 1-12, 1-13, 3-57

Elephant Point, 3-21

Elim, 3-69 - 3-78
see also Resource Information Summary charts for Management Unit 6

Enclosed estuaries. See Anadromous fish streams

Endangered Species, 2-7, 2-47, 2-59

Enforcement, 4-7

Entitlements. See Municipal entitlements

Erosion, 2-41, 2-45, 2-59

Eschscholtz Bay, 3-19 - 3-36

Eskimo Curlew, 2-7
see also Fish and wildlife habitat

Estuaries. See Wetlands, and Anadromous fish streams

F

Feasible and prudent
definition, A-1

Federal Clean Water Act, 2-59

Federal Wild and Scenic River Systems, 3-69

Field Staff and Enforcement, 4-7, 4-8

Fire management, 2-10, 2-25, 2-31
see also Resource Information Summary charts for each Management Unit in Chapter 3, and Forestry

Firewood, 2-31, 2-43
see also Forestry

Fish and wildlife habitat, 1-11, 2-6 - 2-9, 2-15, 2-18, 2-20, 2-22, 2-23, 2-25, 2-30, 2-37, 2-39, 2-40, 2-41, 2-45, 2-47, 2-57, 2-60
community notice, 2-5
criteria for rating, D1, D2
definition, A-2
goals, 2-6
guidelines, 2-6 - 2-9
see also Resource Information Summary charts and Management Intent for each Management Unit in Chapter 3

Fish and Game Advisory Committees, 2-8
 Fish River, 3-57, 3-58, 3-60
 Floodplain, 2-17, 2-18, 2-41, 2-56
 Forestry, 2-10, 2-11, 2-18, 2-20, 2-29, 2-39, 2-53
 criteria for rating, D-1
 goals, 2-10
 guidelines, 2-10
 personal use wood, 2-43
 see also Resource Information Summary charts
 for each Management Unit in Chapter 3
 timber salvage, 2-57
 Forest Practices Act, 2-10, 2-11
 Fuel storage, 2-18, 2-37
 Fuelwood. See Forestry
 Furbearers. See Fish and wildlife habitat

G

Game. See Fish and wildlife habitat,
 Subsistence, and Resource Information
 Summary charts for each Management Unit
 in Chapter 3
 Gates of the Arctic National Park and
 Preserve, 3-37, B-5
 Geese. See Fish and wildlife habitat,
 Subsistence, and Resource Information
 Summary charts for each Management Unit
 in Chapter 3
 General use tidelands and uplands, 3-4, 3-5, 4-2, G-1
 see also Land Use Designation charts for
 each Management Unit in Chapter 3
 Goal
 definition, A-2
 Golden Gate settlement area, 1-9, 1-10, 2-30,
 2-33, 3-58 - 3-60, 3-66
 Golovin. 3-57 - 3-68
 see also Resource Information Summary charts
 for Management Units 5 and 6
 Golovnin Bay, 3-57 - 3-59
 Golovnin Lagoon, 3-57, 3-58, 3-60
 Golsovia River, 3-71
 Goodhope River, 3-19
 Grand Central River, 1-9, 1-10

Granite Mountain, 2-50, 3-19, 4-2
 Grantley Harbor, 3-45, 3-47
 Gravel. See Materials
 Grazing, 1-8, 1-11, 2-12, 2-13, 4-8
 community notice, 2-5
 criteria for rating, D-3
 goals, 2-12
 guidelines for reindeer, 2-12, 2-13
 grazing authorizations, 2-12
 grazing operations plan, 2-12, 2-13
 reindeer fawning areas, 2-23
 see also Fish and wildlife habitat, and
 Resource Information Summary charts for
 each Management Unit in Chapter 3
 Guideline
 definition, A-2
 Guide site, 2-25

H

Habitat. See Fish and wildlife habitat.
 Habitat and harvest tidelands and uplands, 3-5,
 3-6, 4-2, G-1
 see also Land Use Designation charts for each
 Management Unit in Chapter 3
 Haulout. See Marine mammal haulout
 Heritage Resources, 2-14, 2-17, 2-18, 2-22,
 2-31, 2-45, 2-53, 2-56
 criteria for rating, D-1
 definition, A-2
 goals, 2-14
 guidelines, 2-14
 see also Resource Information Summary
 charts, and Background for each
 Management Unit in Chapter 3
 High
 definition, A-2
 Historic sites. See Heritage Resources
 Homesteading. See Settlement
 Hope Basin, 2-48, 3-20, 3-46
 Hotham Inlet, 3-19
 House logs, 2-11, 2-28, 2-31, 2-43
 Hunt River, 3-80
 Hunting. See Fish and wildlife habitat

I

Icy Cape, 2-48, 3-9, 3-10, Appendix H
 Icy Cape Pass, 3-11
 Iditarod Trail, 2-53, 2-54, 3-58, 3-69
 Iditarod National Historic Trail System, 2-53, 2-54
 Ikpek Lagoon, 3-47
 Implementation. See Northwest Area Plan
 Important Use Areas, Appendix J
 see also Management Guidelines for Management Units 4, 5, and 6
 Important Resource Areas, Appendix J
 see also Management Guidelines for Management Units 2, 3, and 7
 Imuruk Basin, 3-45, 3-45
 Inglutalik River, 3-69, 3-71
 INHTS. See Iditarod National Historic Trail System
 Inmachuk River, 2-50, 3-19 - 3-36
 Innoko River, 3-69, 3-71
 Instream Flow, 2-41 - 2-42
 goals, 2-39
 guidelines, 2-41, 2-42
 see also Wetlands
 Interagency Land Management Agreement, 2-47
 Ipewik River, 3-9
 IRA councils, 1-11, Appendix B
 definition, A-2
 Iron Creek, 3-71
 Isaacs Roadhouse, 3-69

K

Kachauik River, 3-60
 Kaguerak River, 3-45
 Kasegaluk Lagoon, 2-50, 3-9, 3-10
 Kauwerak, 3-45
 Kawerak Inc., B-1

Kelly River, 3-20
 Kiana, 3-19 - 3-36
 see also Resource Information Summary charts for Management Units 2 and 3 in Chapter 3
 Kigluaik Mountains, 3-47, 3-48
 King Island Native Corporation, 3-57
 King River, 3-47, Appendix H
 Kivalina, 3-9, 3-19 - 3-36
 see also Resource Information Summary charts for Management Units 1 and 2 in Chapter 3
 Kivalina River, 3-19 - 3-36
 Kiwalik River, 2-50, 3-19 - 3-36
 Klikitarik, 3-70
 Kobuk, 1-9, 1-10, 3-37 - 3-44
 see also Resource Information Summary charts for Management Units 2 and 3 in Chapter 3
 Kobuk Lake, 3-19
 Kobuk River, 1-9, 1-10, 1-11, 1-12, 2-11, 2-24, 2-33, 2-45, 3-5, 4-1, 4-7, Appendix H
 see also Management Units 2, 3, and 7
 Kobuk Valley National Park, 1-2, 3-19, 3-37, 3-79
 Kogoluktuk River, 3-37
 Kogok River, 3-71
 Kokolik River, 3-9, 3-11
 Kollioksak Lake, 3-38
 settlement area, 1-9, 1-10, 2-30, 2-33, 3-39, 3-42, 4-9
 Kotzebue, 2-56, 3-19 - 3-36
 see also Resource Information Summary charts for Management Units 1, 2, and 3
 Kotzebue Sound, 3-19 - 3-36
 Kougarok, 2-50
 Kougarok Mountain, 3-46
 Kougarok River, 3-45, 4-2
 Koyuk, 3-69 - 3-78
 see also Resource Information Summary chart for Management Unit 6
 Koyuk River, 1-12, 1-13, 2-27, 3-69, 3-71

KRM
 definition, A-2

Kugruk River, 2-50, 3-19 - 3-36, 4-2

Kugrupaga River, 3-45

Kugirarok River, 3-9

Kuinktalik River, 3-71

Kukpowruk Pass, 3-11

Kukpowruk River, 2-50, 3-9, 3-11

Kukpuk River, 3-9, 3-10, 3-11

Kuzitrin River, 3-45, 3-58

Kwik River, 3-69, 3-71

Kwiniuk Inlet, 3-71

Kwiniuk River, 3-69, 3-71

L

LADS
 definition, A-2
 see also Settlement

Lakeshore management, 2-15, 2-16, 2-25, 2-26, 2-32
 goals, 2-15
 guidelines, 2-15, 2-16
 see also Fish and wildlife habitat

Land disposals. See Settlement

Land offerings
 definition, A-2
 see also Settlement

Land ownership, 1-2
 see also Background for each Management Unit in Chapter 3

Land sales. See Settlement

Land selections, 3-11, 3-22, 3-39, 3-47, 3-71, 4-1, 4-2, 4-3
 see also maps and Land Use Designation charts for each Management Unit in Chapter 3

Land use designations, 1-14, 3-3, 3-4, 4-2, 4-6, D-4, D-5, G-1
 see also Land Use Designation charts for each Management Unit in Chapter 3

Land Use Designation Charts, 3-3, D-4
 see also each Management Unit in Chapter 3

Land use classifications, 1-7, 1-13, 1-14, 4-2, 4-5

Leasable mineral
 definition, A-3
 see Subsurface resources

Leasehold location
 definition, A-3
 see Subsurface resources

Leases, 1-10, E-1

Legislative designation, 2-40

Lik mineral deposit, 2-50, 2-56, 4-2

Lisburne Hills, 3-9

Lisburne Peninsula, 2-33, 3-6, 3-9, 3-11, 4-1

Little St. Michael River, 3-71

Livestock
 definition, A-3
 see also Grazing

Locatable Minerals
 definition, A-3
 see also Subsurface resources

Lodges. See Recreation

Lopp Lagoon, 3-45, 3-47, 3-52

Lost River, 3-46, 3-47

Low
 definition, A-3

M

Management guidelines, 3-3, 3-6
 see also each Management Unit in Chapter 3

Management intent, 3-3
 see also each Management Unit in Chapter 3

Management Intent Statement
 definition, A-3

Management Units, 3-1, 3-3

Management Unit 1 - Lisburne, 3-1, 3-9 - 3-18

Management Unit 2 - Kotzebue Sound, 3-1, 3-19 - 3-36

Management Unit 3 - Kobuk, 2-27, 2-33, 3-1, 3-37 - 3-44

Management Unit 4 - Northwest Seward Peninsula, 3-1, 3-45 - 3-56

Management Unit 5 - Southwest Seward Peninsula, 2-33, 3-1, 3-57 - 3-68

Management Unit 6 - Norton Sound, 3-1, 3-69 - 3-78

Management Unit 7 - Remnant Rivers, 3-1, 3-79 - 3-82

Maniilaq Association, 2-19, B-2

Mapsorak Lagoon, 3-9

Marine mammal haulouts, 2-8, 2-23, 2-24, 3-10, 3-22, 3-47, 3-59, 3-71
see also maps for each Management Unit in Chapter 3

Marryat Inlet, 3-9, 3-11

Mary's Igloo, 3-45
see also Resource Information Summary charts for Management Units 4 and 5

Materials, 2-17 - 2-19, 2-31, 2-53, 2-60
definition, A-3
goals, 2-17
guidelines, 2-17, 2-18
see also Subsurface resources

Mauneluk River, 1-12, 2-27, 3-37, 3-38
settlement area, 1-9, 1-10, 2-30, 2-33, 3-39, 3-42

Military Training Areas, 1-11

Minakokosa, Lake, 1-12, 1-13, 3-37

Minerals. See Mining

Mineral closures, 1-11, 2-9, 2-47 - 2-51, 3-4, 3-9, 3-10, 3-20, 3-22, 3-38, 3-39, 3-46, 3-47, 3-59, 3-80, 3-82, Appendix H
see also Land Use Designation charts for each Management Unit in Chapter 3

Mineral lands, 3-6, 4-2, G-1
see also Land Use Designation charts for each Management Unit in Chapter 3

Mineral lease
definition, A-3
see Subsurface resources

Mineral orders, 1-7, 4-5, Appendix H

Mining. See Subsurface resources

Mining location
definition, A-3
see Subsurface resources

Mining claim
definition, A-3
see Subsurface resources

Minor changes, 4-6

Mitigation, 2-6

MLUP
definition, A-3

Moderate
definition, A-3

Modifications, 4-6

Moose
overwintering moose and reindeer, 2-8
see also Fish and wildlife habitat, Subsistence, and Resource Information Summary charts for each Management Unit

Mukluktulik River, 3-71

Municipal entitlements, 1-13, 1-14, 4-5

N

NAB. See Northwest Arctic Borough

NANA Regional Corporation, ii, 1-9, 2-19, B-1

Naokok Pass, 3-11

Narvak Lake, 3-37

National Guard Training Area, 1-11, 1-12

National Park Service, 3-79, B-2, I-2

Native owned
definition, A-3

Native selected
definition, A-3

Native selections, 4-9

Navigable waters, 3-4, 3-79 - 3-82, 4-9
definition, A-3

Ninemile Point, 3-20, Appendix H

Niukluk River, 1-12, 3-58

Noatak, 3-19 - 3-36
see also Resource Information Summary charts for Management Units 1, 2, and 3

Naotak National Preserve, 1-2, 3-79, 3-19, 3-37

Noatak River, 1-12, 2-24
see also Management Units 2 and 7

Nome, ii, 1-9 - 1-11, 2-50, 3-45, 3-57 - 3-68, 4-9
 coastal plan, 2-5, 3-58
 see also Resource Information Summary charts
 for Management Units 4 and 5

Nome River, 3-57 - 3-60

Nome-Council Road, 1-9

Nome-Kougarok Road, 2-56, 3-46, 3-48, 3-57,
 4-2, 4-9

Nome-Teller Road, 3-46, 3-47, 3-52, 4-2

Noorvik, 3-19 - 3-36
 see also Resource Information Summary charts
 for Management Units 1, 2, and 3

North River, 3-69

North Slope Borough, ii, iii, 1-14, 3-9, 4-5, B-1
 coastal plan, 1-14, 2-5, 3-10, Appendix J

Northern Access Corridor, 2-56, 4-2

Northwest Arctic Borough, ii, 1-9, 1-11 - 1-14,
 2-20, 4-5 - 4-7, B-1
 coastal plan, 1-14, 2-5, 2-43, 3-20, 3-38, 3-80,
 Appendix J
 see also Management Units 2 and 3

Northwest Area Plan
 communities, 1-5
 description of planning area, 1-2, 1-5
 flexibility, 1-7, 3-6, 4-6 - 4-7
 implementation, 1-7, 4-1 - 4-10
 physiography, 1-5
 plan development, 1-6

Norton oil and gas basin, 3-69

Norton Sound, 2-50, 3-57, 3-69, 4-1
 see also Management Units 5 and 6

Norton Bay, 2-48

Norutak Lake, 1-12, 1-13, 3-38

NPS. See National Park Service

NSB. See North Slope Borough

Nuisance animals, 2-8

Nuluk River, 3-45, 3-47

Nutuvukti Lake, 3-37

NWAP. See Northwest Area Plan

O

Office of Coastal Resource Management, 1-14

Office of History and Archaeology, 2-14

Office of the Ombudsman, I-1

Off-road vehicles, 2-57

Ogatoruk River, 3-9

Oil and gas, 1-11, 1-12, 2-20, 3-9, 3-11
 see also Subsurface resources, and Resource
 Information Summary charts for each
 Management Unit in Chapter 3
 criteria for rating, D-3

Omalik Lagoon, 3-9

Omar River, 3-80

Onion Portage, 3-80

ORV. See Off-road vehicles

Osborne, Mt., 3-47, 3-48, 3-52, 4-2

Overlapping selections, 4-9

P

Pah River, 1-9, 1-10, 3-37

Penny River, 3-60

Peregrine Falcons, 2-7, 2-47
 see also Fish and wildlife habitat

Periodic review, 4-6

Permits, 1-10, E-1

Pilgrim River, 3-47, 3-58, 3-59
 settlement area, 1-9, 1-10, 2-30, 2-33,
 3-58 - 3-60, 3-66

Pikmiktalik River, 3-71

Pinguk River, 3-45, 3-47

Pipelines, 2-49, 2-55

Pitmegea River, 3-9, 3-11

Planning process, 1-6

Planning reports, C-1

Planning Staff, i, ii

Planning Team, i, ii, 1-6

Point Creek, 3-71

Point Franklin, 2-48

Point Hope, 3-9
see also Resource Information Summary charts
for Management Unit 1

Point Lay, 3-9
see also Resource Information Summary charts
for Management Unit 1

Population, F-1

Port Clarence, 3-45, 3-46, 3-47

Portage Roadhouse, 3-70

Powers Creek, 3-71

Primary use, 3-3, D-4, D-5
definition, A-3
see also Land Use Designation charts for
each Management Unit in Chapter 3

Prohibited use
definition, A-4

Prospect, 2-56, 4-9

Public access. See Access

Public and Commercial Recreation Resources.
See Recreation

Public notice, 1-11, 2-5, 3-6
guidelines, 2-5
community notice, 2-5
community notice list, B1
federal CSU notice, 2-5

Public participation, 1-6, 2-5

Public Review Draft, 1-6

Public Trust Doctrine, 4-9
definition, A-4

Public use cabins, 1-12

Publications related to plan, Appendix C

R

Raptors. See Fish and wildlife

RAS. See Resource Allocations Section

Reclamation, 2-45

Recreation, 2-15, 2-18, 2-20, 2-22 - 2-24, 2-25,
2-29, 2-37, 2-39, 2-40, 2-41, 2-45, 2-47, 2-53,
2-59, 2-60, 3-4
community notice, 2-5

criteria for rating, D-3

goals, 2-22

guidelines, 2-22 - 2-24
see also Settlement, and Management
Guidelines and Resource Information
Summary charts for each Management
Unit in Chapter 3

Recreation lands, 3-5
see also Land Use Designation charts for
each Management Unit in Chapter 3

Red Dog mine, 2-50, 3-6, 3-19 - 3-36
transportation corridor, 3-21

Redstone River, 3-37, 3-80

Reed River, 1-12, 1-13, 3-37

References, G-1, G-2

Reindeer. See Grazing

Reindeer Herder's Association, B-5

Relinquishments, 4-1

Remote Cabins, 1-11, 2-25 - 2-27, 2-28, 2-44,
2-50, 3-58, 3-60, 3-71, 4-7
community notice, 2-5
definition, A-4
goals, 2-25
guidelines, 2-25, 2-26
see also Land Use Designation charts for
each Management Unit in Chapter 3

Resource Allocations Section, i, ii

Resource Information Summary charts, 3-3,
Appendix D
see also each Management Unit in Chapter 3

Resource ratings, D-1

Resource reports, C-1, C-2

Retained lands, 2-15

Rights-of-Way, 2-20, 2-26, 2-53, 2-57
see also Access, Trails.

Riparian
definition, A-4

Riprap. See Materials

Rocky Point, 3-58, 3-59, Appendix H

RS 2477, 2-20, 4-9
definition, A-4
see also access

S

- Safety Sound, 3-57 - 3-60
- Salmon. See Fish and wildlife habitat and Subsistence
- Salmon Lake, 3-47, 3-58, 3-59
- Salmon River, 3-80
- Sand. See Materials
- Saunders Creek, 3-60
- Scenic resources, 2-24, 2-31, 2-40, 2-45, 2-53, 2-56
- SCS. See Soil Conservation Service
- Seabird colonies, 1-11, 2-8, 2-9, 2-23, 2-24, 2-48, 2-50, 3-4, 3-10, 3-22, 3-46, 3-47, 3-58, 3-59, 3-70, Appendix H
see also Fish and wildlife habitat, and Resource Information Summary charts for each Management Unit in Chapter 3
- Seabird rookeries. See Seabird colonies
- Seal haulout areas. See Marine mammal haulout areas
- Sea lion haulout areas. See Marine mammal haulout areas
- Seawalls. See Shoreline development
- Secondary use, 3-3, D-4, D-5
definition, A-4
see also Land Use Designation charts for each Management Unit in Chapter 3
- Selawik, 3-19 - 3-36
see also Resource Information Summary charts for Management Units 2 and 3
- Selawik Basin, 2-48, 2-50
- Selawik Lake, 3-19, 3-21
- Selawik National Wildlife Refuge, 1-2, 3-19, 3-37, B-2
- Selawik River, 3-19, 3-21, 3-80
- Selby Lake, 3-37
- Selections. See Land selections
- Sensitive Use Areas, Appendix J
see also Management Guidelines for Management Units 2, 3, and 7
- Serpentine River, 3-45, 3-47
- Serpentine Hot Springs, 3-46
- Setbacks, 2-15, 2-30, 2-54, 3-60
- Settlement, 1-9, 1-10, 1-14, 2-18, 2-20, 2-28 - 2-36, 2-45, 2-46, 2-47, 2-50, 2-55, 2-59, 2-60, 3-39, 3-58 - 3-60, 4-7
community notice, 2-5
criteria for rating, D-2
goals, 2-28, 2-29
guidelines, 2-29 - 2-32
pacing, 2-30, 3-60
see also Remote cabins, and Resource Information Summary charts for each Management Unit in chapter 3.
- Settlement lands, 3-6, 4-2, G-1
see also Land Use Designation charts for each Management Unit in Chapter 3
- Seward Peninsula, 1-8, 1-9, 1-11, 1-12, 2-11, 2-30, 2-33, 2-50, 3-4, 3-5, 4-1
see also Management Units 2, 4, 5, and 6
- Shaktoolik, 3-69 - 3-78
see also Resource Information Summary charts for Management Unit 6
- Shaktoolik Bay, 3-71
- Shaktoolik River, 3-69
- Shall
definition, A-4
- Sheefish
spawning areas, 1-11, 2-9, 2-23, 2-24, 2-48, 2-50, 3-4, 3-39, 3-80, 3-82, Appendix H
see also Fish and wildlife habitat, and Resource Information Summary charts for each Management Unit in Chapter 3
- Shelter Cabins, 2-22, 4-8
- Shishmaref, 3-45 - 3-56
see also Resource Information Summary charts for Management Units 4 and 5
- Shishmaref Inlet, 3-45, 3-47
- Shorelands, 2-5, 2-30, 3-4, 3-79 - 3-82
definition, A-4
see also Management Intent for each Management Unit in Chapter 3
- Shoreline Development, 2-37, 2-38, 2-61
definition, A-4
goals, 2-37
guidelines, 2-37, 2-38

- Should
 - definition, A-4
- Shungnak, 1-9, 1-12, 3-37 - 3-44
 - see also Resource Information Summary charts for Management Units 2 and 3
- Shungnak River, 3-37, 3-42
- Significant Impact, Effect, Conflict, or Loss
 - definition, A-4
- Silverbow Creek, 3-60
- Sinuk River, 1-9, 1-12, 1-13, 2-27, 3-57, 3-58, 3-60, 3-66
- Sisoalik Spit, 3-21
- Sitnasuak Native Corporation, 3-57
- Snake River, 3-60
- SNC. See Sitnasuak Native Corporation
- Snowmachines, 2-57
 - see also Recreation
- Soil Conservation Service, 1-8, 2-12, 4-8, I-2
- Solivik Island, 3-10, Appendix H
- Solomon, 3-57 - 3-68
- Solomon River, 3-57, 3-60
- Special exceptions, 4-6
- Special Use Areas
 - definition, A-4
- Sportfishing. See Recreation and Fish and wildlife habitat
- Spruce Creek, 3-47, 3-71
- Squirrel River, 3-80, 4-1
- St. Michael, 3-69 - 3-78
- St. Michael Bay, 3-69
- State Omnibus Road
 - definition, A-4
- Statewide goals, 1-7, 1-8, 4-7
- State-owned land
 - definition, A-5
- State-selected land
 - definition, A-5
 - see also Land selections
- Stebbins, 3-69 - 3-78
- Stream corridors, 2-23, 2-25, 2-26, 2-32, 2-61
 - goals, 2-39
 - guidelines, 2-39 - 2-41
- Structures
 - fish habitat, 2-7, 2-15, 2-41
 - water intake, 2-7, 2-15, 2-41
- Stuart Canal, 3-69
- Stuart Island, 3-70
- Subdivision design. See Settlement
- Submerged lands, 2-5
 - definition, A-5
- Subsistence, 1-5, 1-8, 1-11, 2-8, 2-15, 2-20, 2-22, 2-25, 2-26, 2-39, 2-53, 2-56, 3-4, 4-7, 2-43, 2-44, 2-46, 2-56, 2-58, 2-61
 - community notice, 2-5
 - criteria for rating, D-3
 - definition, A-5
 - goals, 2-43
 - guidelines, 2-43, 2-44
 - see also Fish and wildlife habitat, and Resource Information Summary charts and Management Intent for each Management Unit in Chapter 3
- Subsurface designations, 3-4
 - see also Land Use Designation charts for each Management Unit in Chapter 3
- Subsurface resources, 1-11, 1-12, 2-22, 2-25, 2-26, 2-29, 2-31, 2-45 - 2-54, 3-10
 - criteria for rating, D-2
 - goals, 2-45
 - guidelines, 2-45 - 2-54
 - see also Materials; and Resource Information Summary charts, Management Intent, and Management Guidelines for each Management Unit in Chapter 3
- Subunits, 3-3, 3-4, 3-10
- Suitability category, D-1
- Swans
 - tundra swans, 2-7
 - see also Fish and wildlife habitat, and Resource Information Summary charts for each Management Unit in Chapter 3

T

Table of Contents, v

Tagoomenik River, 3-71

Taylor, 2-50, 3-45, 3-58

Teller, 3-45 - 3-56, 3-58
see also Resource Information Summary
charts for Management Units 4 and 5

Tent camps. See Recreation

Threatened and endangered species, 2-7, 2-47,
2-59

Tidelands, 2-5, 2-37, 2-38
definition, A-5

Tideland facilities, 2-5
see also Shoreline Development

Timber. See Forestry

Timber salvage, 2-10

Topkok, 3-59, Appendix H

Topkok Head, 3-59, Appendix H

Topkok River, 3-60

Tourism. See Recreation

Traditional village councils, 1-11, Appendix B
definition, A-2

Traditional uses, 2-8, 2-22, 2-23, 2-25 - 2-27,
2-38, 2-43, 2-44, 2-46, 2-57, 4-7
definition, A-5

Traditional use campsite, 2-25

Trails, 2-22, 2-25, 2-27, 2-31, 2-45, 2-55, 2-57,
3-48, 3-58
guidelines, 2-55 - 2-57
see also Access, and Resource Information
Summary charts for each Management
Unit in Chapter 3

Transportation, 2-17, 2-29, 2-41, 2-46,
2-58 - 2-60, 4-9
guidelines, 2-58 - 2-60
see also Trails, Access, and Resource
Information Summary charts for each
Management Unit in Chapter 3

Traplines. See Trapping cabins

Trapping. See Trapping cabins

Trapping cabins, 1-10, 1-11, 2-25 - 2-27, 2-44,
3-4, Appendix E
community notice, 2-5
definition, A-5
goals, 2-25
guidelines, 2-26, 2-27

Trout Creek, 3-47

Tubutulik River, 3-69, 3-71

Tuksuk Channel, 3-47

Twenty-Two Mile Roadhouse, 3-69

U

UM
definition, A-5

Unalakleet, 3-69 - 3-78

Unalakleet River, 3-69, 3-71

Unauthorized uses, 4-8

Ungalik River, 3-69, 3-71

Unknown
definition, A-5

Unsuitable
definition, A-5

Upland owner, 2-5, 2-15, 2-18
see also Coordination

U.S. Army Corps of Engineers, 2-59

USDA. See U.S. Department of Agriculture

U.S. Department of Agriculture, 2-12

USF&WS. See U.S. Fish and Wildlife Service

U.S. Fish and Wildlife Service, I-2

Utilities. See Transportation

Utukok River, 3-9, 3-11

Utukok Pass, 3-11

Uyakturok River, 3-9

V

Vacant, unappropriated, and unreserved land,
4-5

Visual resources. See Scenic resources.

VUU. See vacant, unappropriated, and
unreserved land

W

Wainwright, 3-9
see also Resource Information Summary
charts for Management Unit 1

Wales, 3-45 - 3-56
see also Resource Information Summary
charts for Management Units 4 and 5

Walrus haulout areas. See Marine mammal
haulouts

Waterfowl, 2-7
see also Fish and wildlife habitat, and
Resource Information Summary charts for
each Management Unit in Chapter 3

Western Access Corridor, 2-56, 4-9

Wetlands, 2-23, 2-25, 2-27, 2-30, 2-37, 2-41,
2-59, 2-61 - 2-63
definition, A-5
guidelines, 2-61 - 2-63
see also Access, Fish and wildlife habitat,
Instream flow, Shoreline development,
and Stream corridors

Whales. See Fish and wildlife habitat and
Subsistence

White Mountain, 3-57 - 3-68
see also Resource Information Summary
charts for Management Units 5 and 6

Wildfires. See Fires

Will
definition, A-5

Worker education, 2-49

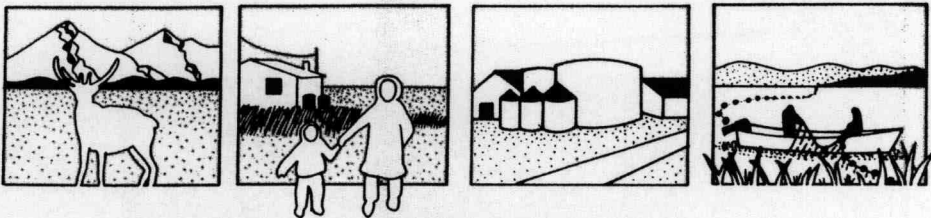
Wulik River, 1-12, 3-9, 3-19 - 3-36

Y

York Mountains, 3-45

Younglik River, 3-60

NORTHWEST AREA PLAN



FOR STATE LANDS

Alaska Department of Natural Resources
Land and Resources Section
3700 Airport Way
Fairbanks, AK 99709
451-2700



WHAT IS THE NORTHWEST AREA PLAN?

The Northwest Area Plan describes how the Department of Natural Resources (DNR) will manage state land, including uplands and tide, shore, and submerged land (see map on other side), in Northwest Alaska. The plan determines land classifications, land disposal locations, remote cabin areas, land selections, and areas open to mineral entry, and provides guidelines for leases and permits on state lands. The plan does not make decisions for federal, Alaska Native Claims Settlement Act (ANCSA) corporation, or private lands, nor does it change fish and game regulations.

The Northwest Planning Area includes the Lisburne Peninsula up to Icy Cape, Kotzebue Sound and the Kobuk River Valley, the Seward Peninsula, and Norton Sound. Approximately one-fourth of the land within the planning area (about 11 million acres of uplands and about 5 million acres of tide, shore, and submerged lands) has been selected by or is owned by the state.

Some of the state-selected land is also selected by Native corporations and may not become state land. The planning area does not include state-owned tide or submerged lands around islands more than three miles offshore.

State land in the Northwest Planning Area provides fish, wildlife, water, firewood, minerals, materials, transportation routes, and places to live and recreate. There are many different ideas about how this land should be used, and some of the uses may conflict. However, if the land is managed carefully, many different uses can occur throughout the planning area.

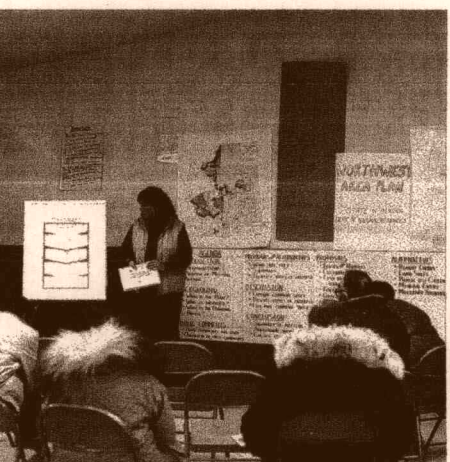


Village of Golovin

HOW WAS THE PLAN DEVELOPED?

The Northwest Area Plan is the product of three and a half years of work by the planning team, interest groups, and the general public. The planning team includes 18 representatives from state agencies, coastal programs, local governments, and ANCSA corporations. Over 75 public meetings and workshops have been held in Anchorage and Fairbanks, and throughout the planning area to gather public comments and ideas.

DNR began work on this plan in 1985. In that year, public meetings were held to learn about important issues in the Northwest Area and to gather ideas about how state lands should be managed. Information was gathered on each resource in the planning area, and resource reports were prepared. Using information from the meetings and from the resource reports, the planning team developed alternatives for how to use state land. In Spring 1987, these alternatives were reviewed at public meetings in each community in the planning area and in Anchorage and Fairbanks. Based on comments from these meetings, the planning team developed the proposals in the draft plan. The draft plan was reviewed by the public at meetings in the same communities during Fall 1988. These comments were used to make final changes in the plan. The plan was adopted by the commissioners of Natural Resources and Fish and Game in February and April of 1989.



Public meeting at Shishmaref

LAND MANAGEMENT SUMMARY

Management of the major resources is summarized in the following sections. The Northwest Area Plan also includes policies for cultural and historic resources, forestry, materials (sand and gravel), public access, trails and transportation, lakes, streams, and wetlands. The map on the other side of this brochure shows land use designations for state lands.

Fish and Wildlife Habitat and Harvest

All lands serve as fish or wildlife habitat and harvest areas to some degree. The most important habitat and harvest areas will be retained in public ownership and managed to maintain fish and wildlife production and related public uses. Fish and wildlife habitat and harvest are primary uses of state lands along most rivers, streams, and lakes with anadromous fish and important resident fish populations. Over five million acres of uplands and three million acres of tidelands have been designated as wildlife habitat.

Special guidelines apply to particularly important habitat areas, such as marine mammal haulouts and mouths of anadromous streams or enclosed estuaries. Certain areas are closed to mineral entry to protect important habitat (see Minerals).

Fishing and hunting allocation issues cannot be addressed by DNR. The boards of Fisheries and Game determine allocation for harvest, and the Department of Fish and Game manages the fish and wildlife species. DNR manages the habitat and access to the habitat.

Land Sales

The Northwest Area Plan determines which lands will be offered for private ownership in the planning area. Up to 1,250 acres in five areas are proposed to be offered for disposal over the next 20 years. Three of these areas are on the Seward Peninsula and two are on tributaries of the upper Kobuk River. The design of each land sale area will include public notice and community input.

In the upper Kobuk River area, the plan proposes land sale offerings on the Mauneluk River (75-150 acres) and Kolliksak Lake (100-200 acres). If the land sale areas are selected and conveyed to the Northwest Arctic Borough, management of that land will be decided by borough policies and plans. The plan defers land sales in the Kobuk River area for five years or until the borough's comprehensive plan is complete, whichever comes first.

A total of 900 acres in parcels up to 10 acres each will be sold on the Seward Peninsula. The three land sale areas are on the road system north of Nome. They are Christian Creek (650 acres), Golden Gate (150 acres), and Pilgrim River (100 acres). These areas are designated for dispersed homestead offerings.

Remote Cabins

The state can issue 25-year permits to individuals to build cabins on scattered sites in remote areas. The Northwest Area Plan decides what areas will be open for remote cabin permits and how many remote cabins will be allowed in each area.

A total of 131,200 acres in the Sinuk and upper Koyuk river areas will be open to remote cabin permits when the program is approved for implementation. Actual cabin sites will be widely scattered in these areas, with only 14 permits made available.

Recreation

Most state lands will continue to be available for public recreation and for permits and leases for commercial recreation facilities. However, commercial recreation leases will not be allowed in the following high value habitat areas: seabird colonies, marine mammal haulout areas, sheefish spawning sites, and mouths of anadromous streams and enclosed estuaries. These high value habitat areas are shown on the map on the other side of this brochure.

In the planning area, recreation is a co-primary land use designation for state uplands along the Kobuk River. To address the potential impacts of recreation on subsistence activities in the Kobuk River area, the plan recommends detailed study of this area, in cooperation with other landowners.

The plan does not propose designating any state land for parks, recreation areas, or recreation sites specifically reserved for outdoor recreation. Recreational and scenic qualities of state lands will be protected through plan guidelines.



Kotzebue neighborhood

Leases and Permits

The Northwest Area Plan allows leases and permits in most of the planning area. Each request will be reviewed for compliance with the plan's management guidelines and policies.

Leases for commercial recreation facilities will not be allowed in certain habitat areas (see Recreation). Trapping cabin construction permits should not be issued if the cabin conflicts with existing trapping and subsistence activities.

Under plan guidelines, community and public notice will be given for all trapping cabin construction permits, exclusive use permits, reindeer grazing permits, land sales, remote cabins, oil and gas lease sales, and other leases and sales of state resources. The plan lists organizations to be notified, including city offices, IRA and traditional councils, and ANCSA corporations.

Minerals

Mining is a primary use for about 1.2 million acres of state land in the planning area. These lands were designated because of their high mineral values and because some mineralized regions are currently developed or are likely to be developed in the near term (5-10 years).

Nearly all state land in the planning area is open to mineral entry. Only land within one-quarter mile of 13 seabird rookeries and land within 200 feet of seven sheefish spawning sites will be closed to new mineral entry. State lands closed to new mineral entry total 9,320 acres. Settlement areas will be closed to new mineral entry prior to sale.

Mineral closures and other policies resulting from this plan neither alter nor replace existing regulations, nor do they affect existing mineral closures. The closures resulting from this plan apply only to new exploration and development activities. Existing leases, prospecting permits, or mining claims will not be affected.

Oil and Gas, Coal, and Other Leasable Minerals

All state uplands, and tide and submerged lands are available for oil and gas exploration. The plan defers decisions concerning leasing for oil and gas to DNR's Five-Year Oil and Gas Leasing Program. No areas in Northwest Alaska are currently proposed for lease.

All state land in the planning area is available for coal prospecting and leasing except for one seabird rookery near Corwin Bluffs. All state land in the planning area will remain open to leasing for other leasable minerals, such as oil shale, sedimentary uranium, potassium, sodium, and geothermal resources. Any leases for coal or other leasable minerals will be dealt with on a case-by-case basis consistent with the intent of the appropriate management unit, plan guidelines, and existing laws and regulations.

Reindeer Grazing

State lands will continue to be available for reindeer grazing. Reindeer grazing may take place whenever compatible with the primary uses of the land. Permits may be issued until grazing operation plans are developed for long-term authorizations. The plan recommends cooperative agreements among the various land owners to simplify the permitting process.

Subsistence

Subsistence concerns are one of the most important issues the plan addresses. The plan recognizes subsistence needs by retaining over 99 percent of state land in public ownership. The plan also requires that subsistence activities be considered when managing state land for multiple uses. Plan policies assure that development activities will occur with a minimum of impact to the mixed cash-subsistence economy of the region.

General Use Lands

Land with little access and low surface value is designated for "General Use." These lands will be kept in state ownership and will remain available for public use. They will remain open to new mineral entry, except within one-quarter mile of important bird rookeries (see Minerals).

HOW CAN THE PLAN BE CHANGED?

The plan must be flexible to respond to changes in information, technology, economics, and public opinion. The plan may be amended with the approval of the Commissioner of DNR, after public review and consultation with affected agencies. The plan will be reviewed approximately every five years for necessary updates.

Special exceptions to the plan can be made in cases where it is impossible or impractical to comply with the plan, and when an alternative course of action can meet the plan's purpose. Special exceptions require public notice. Minor changes to the plan, such as clarifications or corrections, do not require public review.



A main street, Teller

OTHER FEATURES

New State Land Selections

The state is entitled to select additional lands from vacant, unappropriated, and unreserved federal lands. Most federal land available for selection in the Northwest Area has low surface and subsurface resource values and is not desirable for state selection. Some lands with high resource values or strategic locations merit state selection.

Approximately 500,000 acres in 14 parcels are recommended for selection. Lands proposed for selection are shown on the map on the other side of this brochure. Some of these parcels have already been selected by Native corporations. If the state files a selection on Native-selected land, the state selection is valid only if the Native selection is relinquished or rejected.

Municipal Land Selections

To facilitate land transfer to the Northwest Arctic and North Slope boroughs, DNR will defer classification of preliminary areas of interest for borough selection until the borough selections are formally submitted. Following receipt of the selections, land not selected by the boroughs will be classified according to the plan designations in the management units. Before any transfer to municipal ownership, the land will be reviewed for state interests.

Coastal Management Programs

The policies of the Northwest Area Plan for state land within the coastal zone are consistent with state coastal management standards and with any approved district programs. Four coastal districts exist within the Northwest Planning Area: the North Slope Borough, the City of Nome, the Northwest Arctic Borough, and the Bering Straits Coastal Resource Service Area.

WHERE TO GET A COPY OF THE PLAN?

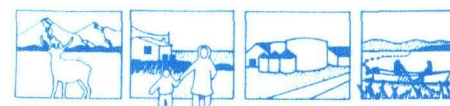
Copies of the complete plan have been sent to city and borough offices, IRA and traditional councils, ANCSA regional and village corporations, libraries, and interest groups in the planning area. Additional copies can be purchased for \$5.00 each from:

Alaska Department of Natural Resources
Land and Resources Section
3700 Airport Way
Fairbanks, AK 99709
451-2700

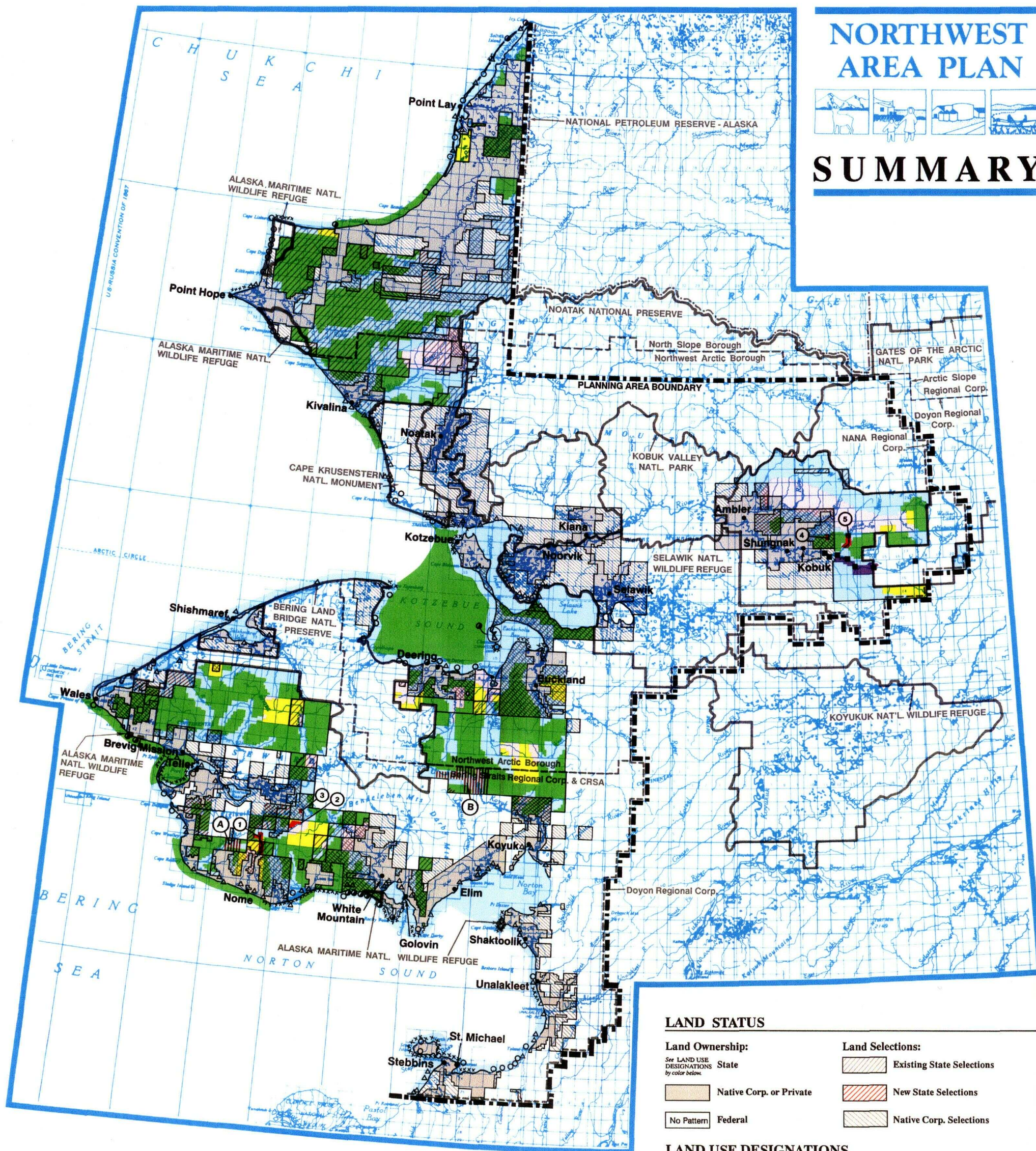


St. Michael

NORTHWEST AREA PLAN



SUMMARY



LAND STATUS

Land Ownership:

See LAND USE DESIGNATIONS by color below.

- State
- Native Corp. or Private
- Federal

Land Selections:

- Existing State Selections
- New State Selections
- Native Corp. Selections

LAND USE DESIGNATIONS

- General Use: Uplands & Tidelands
- Habitat & Harvest: Uplands & Tidelands
- Habitat & Harvest/Recreation
- Minerals or Coal/Habitat & Harvest
- Minerals

Settlement:

- 1 Christian Creek
- 2 Pilgrim River
- 3 Golden Gate
- 4 Kolliksak Lake
- 5 Mauneluk River

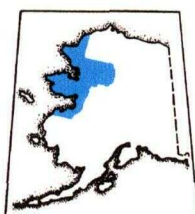
- Remote Cabin Areas:
- A Sinuk River
- B Upper Koyuk River

AREAS CLOSED TO NEW MINERAL ENTRY

- Seabird Rookeries
- Sheefish Spawning Areas

SPECIAL HABITAT AREAS

- Seabird Rookeries
- Marine Mammal Haulouts
- Anadromous Stream Mouths or Enclosed Estuaries



Location of Study Area

0 6 12 18 24 30
SCALE IN MILES